

SECTION ADP

AUTOMATIC DRIVE POSITIONER

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precautions for Removing Battery Terminal

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- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

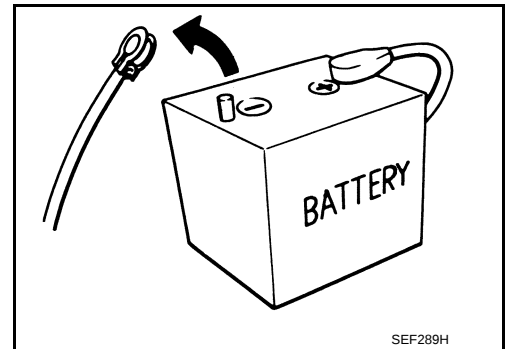
NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.



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COMPONENT PARTS

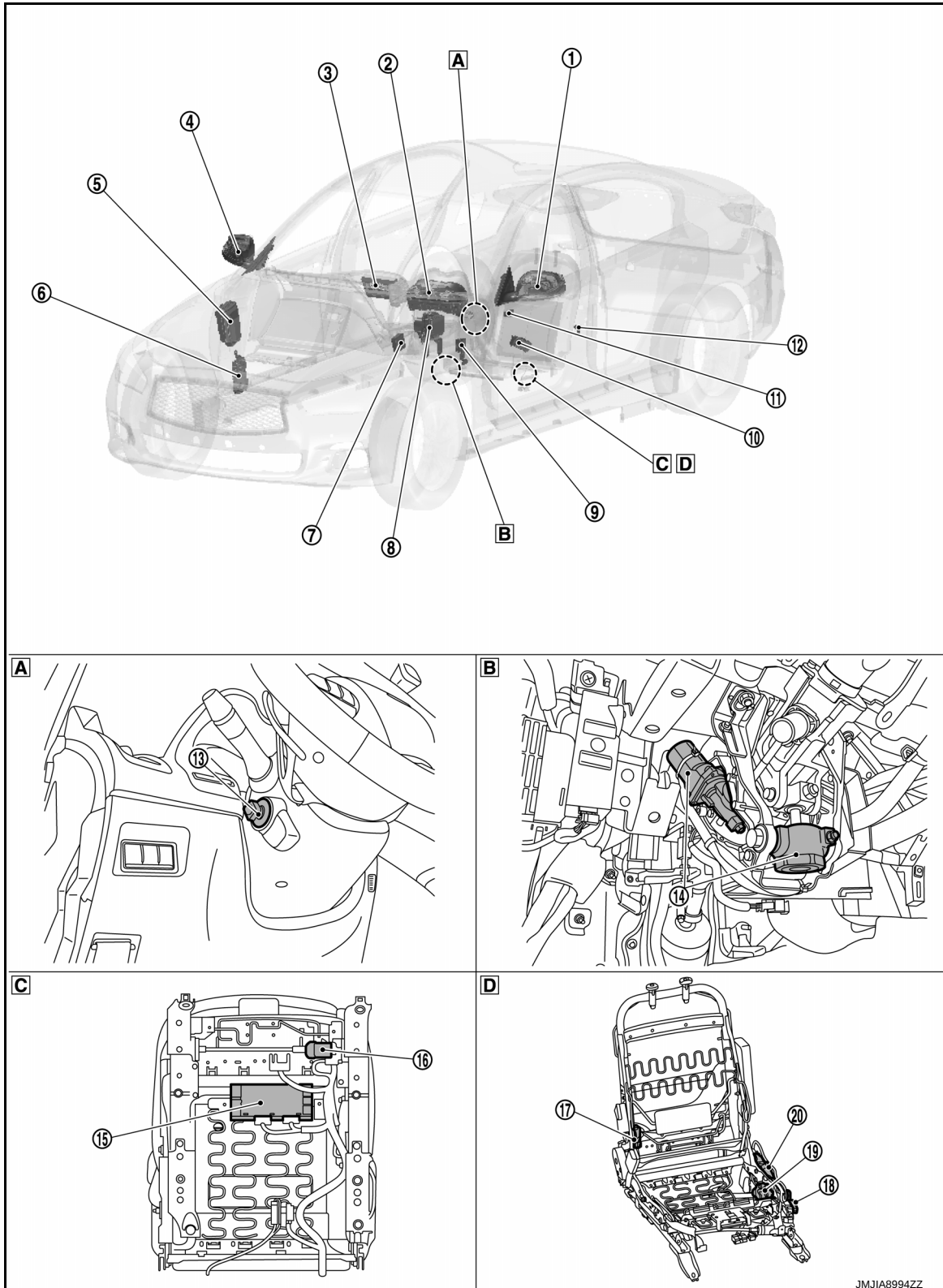
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

- A View with steering column cover lower
B View with steering column cover lower and instrument driver lower panel removed
C Back side of seat cushion
D View with seat cushion pad and seat back pad remove

No.	Component		Function
①	Door mirror (driver side)	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies. Refer to MIR-5, "Component Parts Location" for detailed installation location.
		Mirror sensor	- Mirror sensor is installed to door mirror. - The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated. - Automatic drive positioner control unit calculates door mirror position according to the change of the voltage of 2 sensor input terminals. Refer to MIR-5, "Component Parts Location" for detailed installation location.
②	Combination meter		Transmit the vehicle speed signal to driver seat control unit via CAN communication.
③	Display control unit		Transmit the user information signal to driver seat control unit via CAN communication. Refer to AV-14, "Component Parts Location" for detailed installation location.
④	Door mirror (passenger side)	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies. Refer to MIR-5, "Component Parts Location" for detailed installation location.
		Mirror sensor	- Mirror sensor is installed to door mirror. - The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated. - Automatic drive positioner control unit calculates door mirror position according to the change of the voltage of 2 sensor input terminals. Refer to MIR-5, "Component Parts Location" for detailed installation location.
⑤	IPDM E/R		Transmit the detention switch signal to driver seat control unit via CAN communication. Refer to PCS-5, "Component Parts Location" for detailed installation location.
⑥	BCM		Recognizes the following status and transmits it to driver seat control unit via CAN communication. - Handle position: LHD - Driver door: OPEN/CLOSE - Ignition switch position: ACC/ON - Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) - Key ID - Starter: CRANKING/OTHER Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑦	Automatic drive positioner control unit		Refer to ADP-9, "Automatic Drive Positioner Control Unit" .
⑧	ABS actuator and electric unit (control unit)		Transmit the vehicle speed signal to driver seat control unit via CAN communication. Refer to BRC-10, "Component Parts Location" for detailed installation location.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

No.	Component		Function
⑨	Chassis control module		Transmit the key link signal and log-in permit signal to driver seat control unit via CAN communication. Refer to DAS-394, "Component Parts Location" .
⑩	Power window main switch (door mirror remote control switch)	Mirror switch	• Mirror switch is integrated in door mirror remote control switch. • It operates angle of door mirror face. • It transmits mirror face adjust operation to automatic drive positioner control unit. Refer to PWC-6, "Component Parts Location" for detailed installation location.
		Changeover switch	• Changeover switch is integrated in door mirror remote control switch. • Changeover switch has three positions (L, N and R). • It changes operating door mirror motor by transmitting control signal to automatic drive positioner control unit. Refer to PWC-6, "Component Parts Location" for detailed installation location.
⑪	Seat memory switch		Refer to ADP-10, "Seat Memory Switch" .
⑫	Front door switch (driver side)		Detects door open/close condition and transmits to BCM. Refer to DLK-9, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.
⑬	Tilt & telescopic switch		Refer to ADP-10, "Tilt & Telescopic Switch" .
⑭	Tilt & telescopic motor	Tilt motor	Refer to ADP-10, "Tilt & Telescopic Motor" .
		Tilt sensor	
		Telescopic motor	
		Telescopic sensor	
⑮	Driver seat control unit		Refer to ADP-10, "Driver Seat Control Unit" .
⑯	Sliding motor	Sliding motor	• Sliding motor is installed to the seat cushion frame. • Sliding motor is activated with driver seat control unit. • Slides the seat forward/backward by changing the rotation direction of sliding motor.
		Sliding sensor	• Sliding sensor is integrated in sliding motor. • The pulse signal is input to driver seat control unit when sliding is performed. • Driver seat control unit counts the pulse and calculates the sliding amount of the seat.
⑰	Reclining motor	Reclining motor	• Reclining motor is installed to seat back frame. • Reclining motor is activated with driver seat control unit. • Seatback is reclined forward/backward by changing the rotation direction of reclining motor.
		Reclining sensor	• Reclining sensor is integrated in reclining motor. • The pulse signal is input to driver seat control unit when the reclining is operated. • Driver seat control unit counts the pulse and calculates the reclining amount of the seat.

COMPONENT PARTS

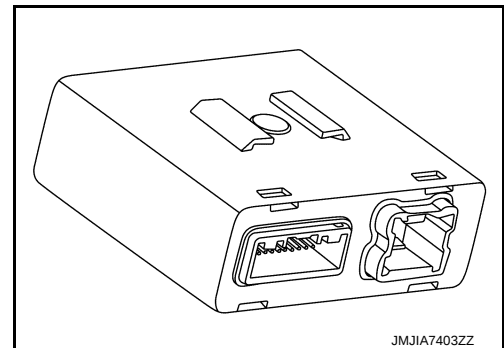
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No.	Component		Function
⑱	Power seat switch	Sliding switch	- Sliding switch is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when sliding switch is operated.
		Reclining switch	- Reclining switch is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when reclining switch is operated.
		Lifting switch (front)	- Lifting switch (front) is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when lifting switch (front) is operated.
		Lifting switch (rear)	- Lifting switch (rear) is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when lifting switch (rear) is operated.
⑲	Lifting motor (front)	Lifting motor (front)	- Lifting motor (front) is installed to seat frame assembly (driver side). - Lifting motor is activated with driver seat control unit. - Lifting motor (front) is moved upward/downward by changing the rotation direction of lifting motor (front).
		Lifting sensor (front)	- Lifting sensor (front) is installed in lifting motor (front). - When lifting motor (front) operates, pulse signal is transmitted to driver seat control unit from lifting sensor. Driver seat control unit counts the pulse and calculates the lift position (front) of the seat.
⑳	Lifting motor (rear)	Lifting motor (rear)	- Lifting motor (rear) is installed to seat frame assembly (driver side). - Lifting motor (rear) is activated with driver seat control unit. - Lifting motor (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear).
		Lifting sensor (rear)	- Lifting sensor (rear) is installed to seat side cushion frame. - The pulse signal is input to driver seat control unit when lifting (rear) is operated. - Driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat.

Automatic Drive Positioner Control Unit

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- It communicates with driver seat control unit via UART communication.
- Perform various controls with the instructions of driver seat control unit.
- Perform the controls of tilt & telescopic and door mirror.
- Operates steering column and door mirror with the signal from the driver seat control.



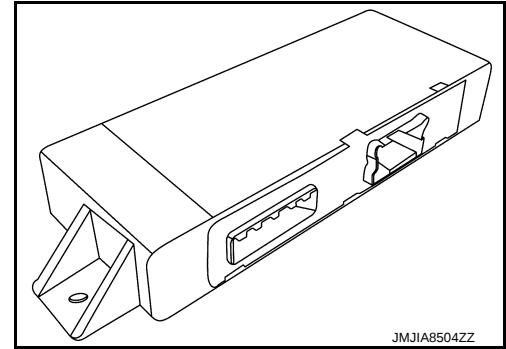
COMPONENT PARTS

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Driver Seat Control Unit

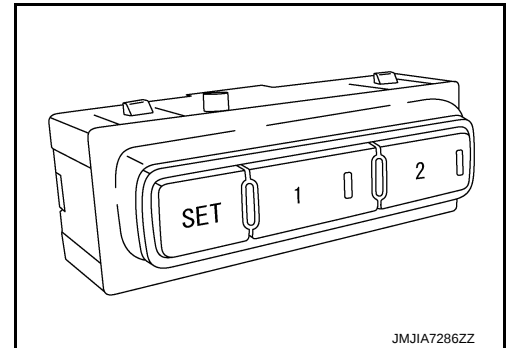
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- Main units of automatic drive positioner system.
- It is connected to the CAN communication system.
- It communicates with automatic drive positioner control unit via UART communication.
- The address of each part is recorded.
- Operates each motor of seat to the registered position.
- Requests the operation of steering column and door mirror to automatic drive positioner control unit.
- Perform the control of seat memory switch.
- Operates the specific seat motor with the signal from power seat switch.



Seat Memory Switch

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SET SWITCH

It is used for registration and setting change of driving position.

SEAT MEMORY SWITCH

- The maximum 2 driving positions can be registered by memory switch 1 to 2.
- Driving position is set to the registered driving position when memory switch is pressed while operation conditions are satisfied.

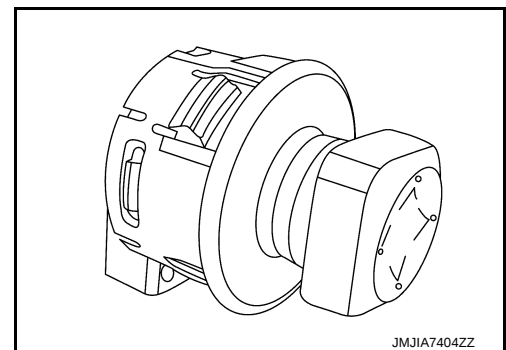
SEAT MEMORY INDICATOR

Memory indicator indicates the status of auto driving position system by turning ON or blinking.

Tilt & Telescopic Switch

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- Tilt & telescopic switch is equipped to steering column.
- The operation signal is input to automatic drive positioner control unit when switch is operated.

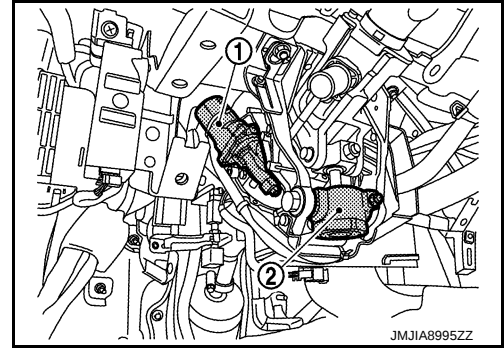


Tilt & Telescopic Motor

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COMPONENT PARTS

< SYSTEM DESCRIPTION >



TELESCOPIC MOTOR

- Telescopic motor ① is installed to steering column assembly.
- Telescopic motor is activated with automatic drive positioner control unit.
- Compresses steering column by changing the rotation direction of telescopic motor.

TELESCOPIC SENSOR

- Telescopic sensor is integrated in telescopic motor ①.
- The resistance of telescopic sensor is changed according to the forward/backward position of steering column.
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of telescopic sensor resistance.
- Automatic drive positioner control unit calculates the telescopic position from the voltage.

TILT MOTOR

- Tilt motor ② is installed to steering column assembly.
- Tilt motor is activated with automatic drive positioner control unit.
- Steering column is tilted upward/downward by changing the rotation direction of tilt motor.

TILT SENSOR

- Tilt sensor is integrated in tilt motor ②.
- The resistance of tilt sensor is changed according to the up/down position of steering column.
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of tilt sensor resistance.
- Automatic drive positioner control unit calculates the tilt position from the voltage.

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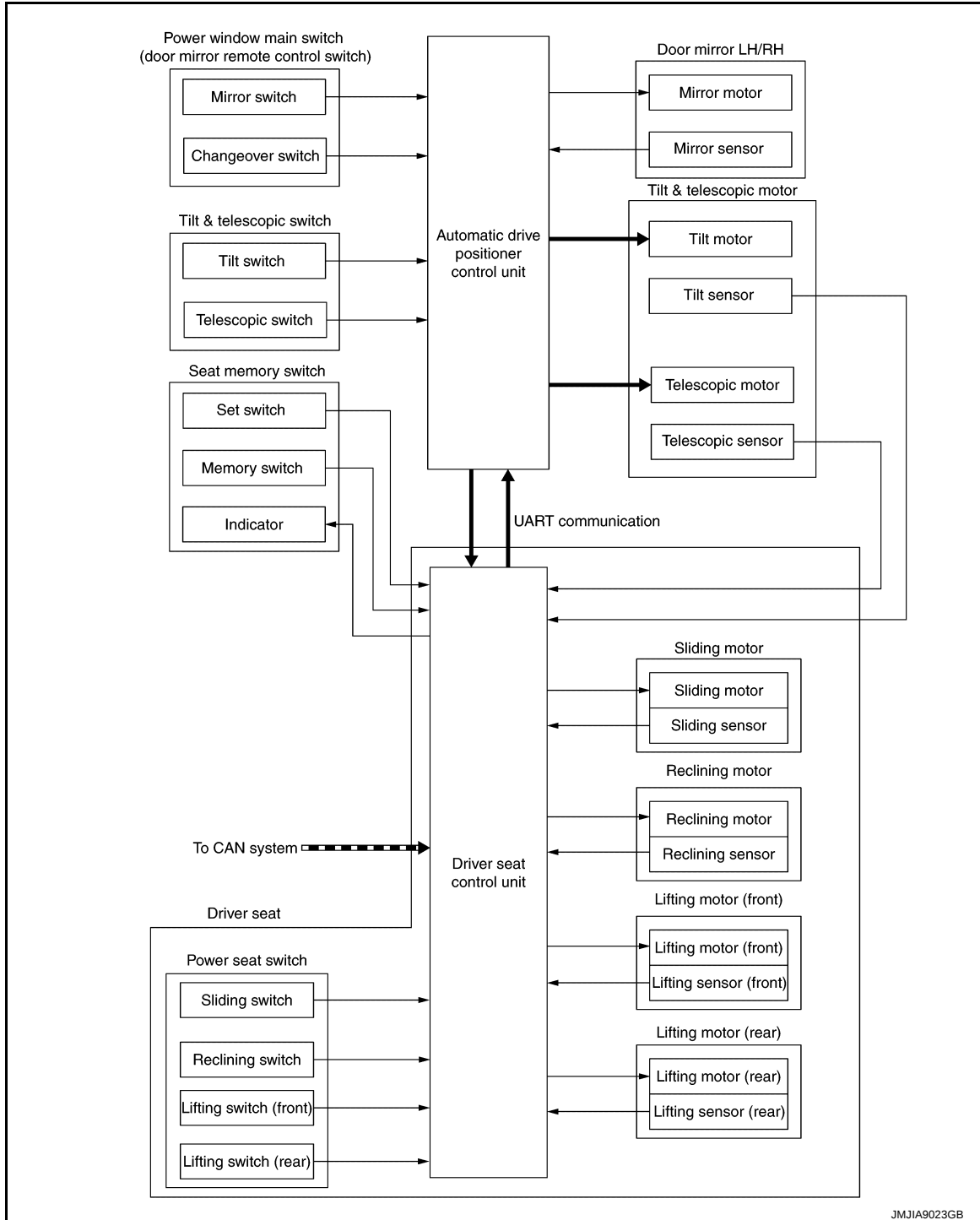
SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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SYSTEM DIAGRAM



DESCRIPTION

Automatic drive positioner system is a system that adjusts the driver seat, steering column, and door mirrors. By using the following functions, an optimum driving position can be achieved. If another driver is seated in the driver seat, the driving position can be easily changed to the preset driving position.

SYSTEM

< SYSTEM DESCRIPTION >

Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch. For details on Manual function, refer to ADP-18, "MANUAL FUNCTION : System Description" .
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2). The seat position set with the seat memory switch cannot be operated interlocked with the Intelligent Key. For details on Memory function, refer to ADP-20, "MEMORY FUNCTION : System Description" .
Entry/Exit assist function	Exit	On exit, the seat moves backward and the steering column moves upward. For details on Exit assist function, refer to ADP-22, "EXIT ASSIST FUNCTION : System Description" .
	Entry	On entry, the seat and steering column returns from exiting position to the previous driving position. For details on Entry assist function, refer to ADP-24, "ENTRY ASSIST FUNCTION : System Description" .
Log-in function		The driving position can be registered and retrieved for each Intelligent Key interlocked with the Log-in function of on board personal. - For Log-in function description, DMS-9, "LOG-IN FUNCTION : System Description". - For driving position operation with Log-in function, refer to ADP-25, "LOG-IN FUNCTION : System Description".
Intelligent Key interlock function		When Intelligent Key interlock function performs the following function, it causes the exit assist function to operate. - Unlock door: Intelligent Key - Unlock door: front door request switch (driver side) - Unlock door: one touch unlock sensor Registered information of the driving position is retrieved from the memory registered to the driver seat control unit by the Login-function. For details on Intelligent Key interlock function, refer to ADP-27, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description" .

NOTE:

The lumbar support system and side support system are controlled independently with no link to the automatic drive positioner system.

Refer to [SE-15, "LUMBAR SUPPORT SYSTEM : System Description"](#), [SE-15, "SIDE SUPPORT SYSTEM : System Description"](#).

Sleep control

Driver seat control unit equips sleep control for reducing power consumption.

The system switches to sleep control when all of the following conditions are satisfied.

- Ignition switch is OFF.
- All devices of auto driving position system are not operating.
- Set switch and memory switch (1 and 2) are OFF.

Wake-up control

Sleep control releases when detecting status change in either of the following item.

- CAN communication
- Power seat switch
- Set switch and seat memory switch (1 and 2)
- Tilt & telescopic switch

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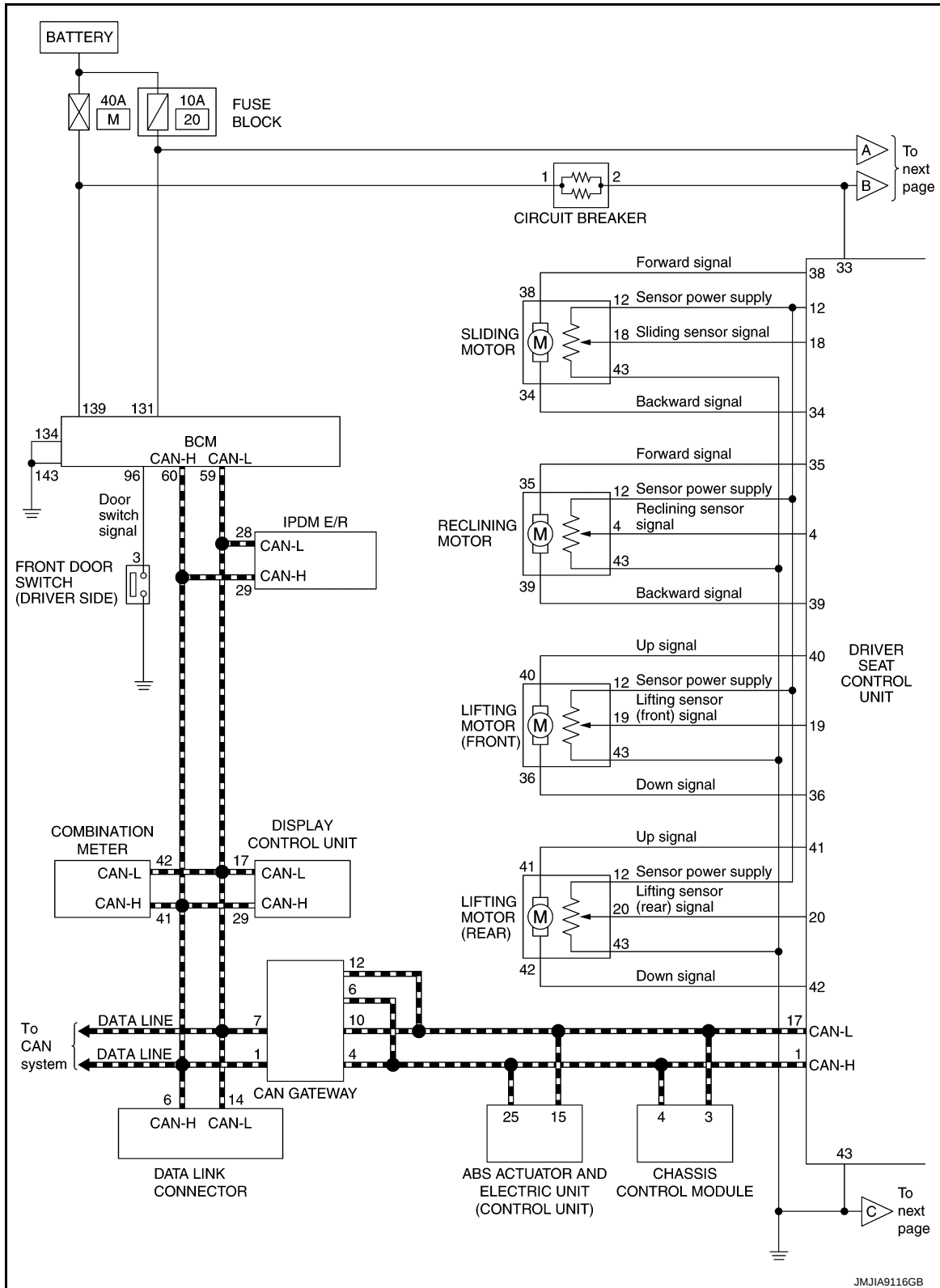
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SYSTEM

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AUTOMATIC DRIVE POSITIONER SYSTEM : Circuit Diagram

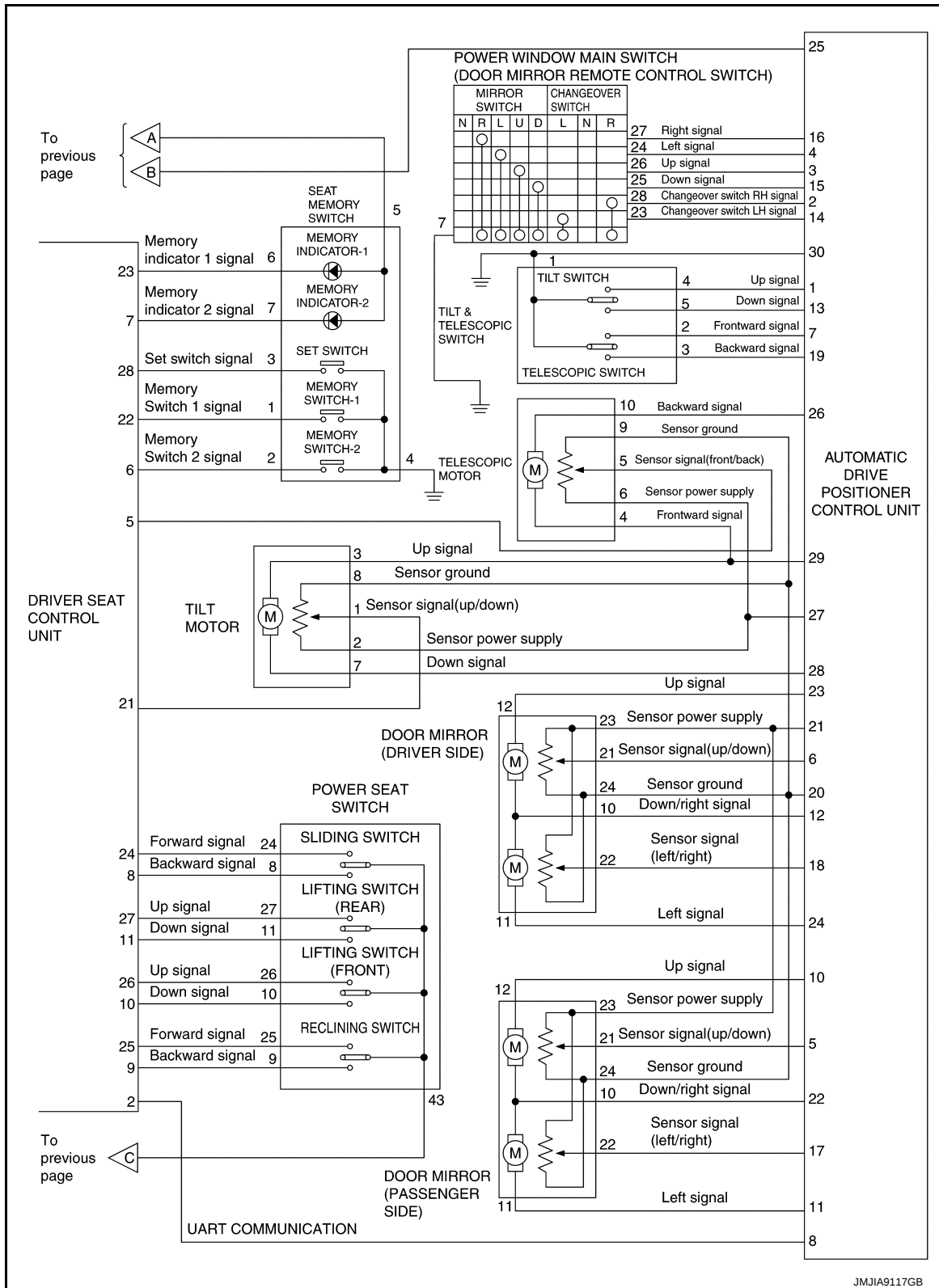
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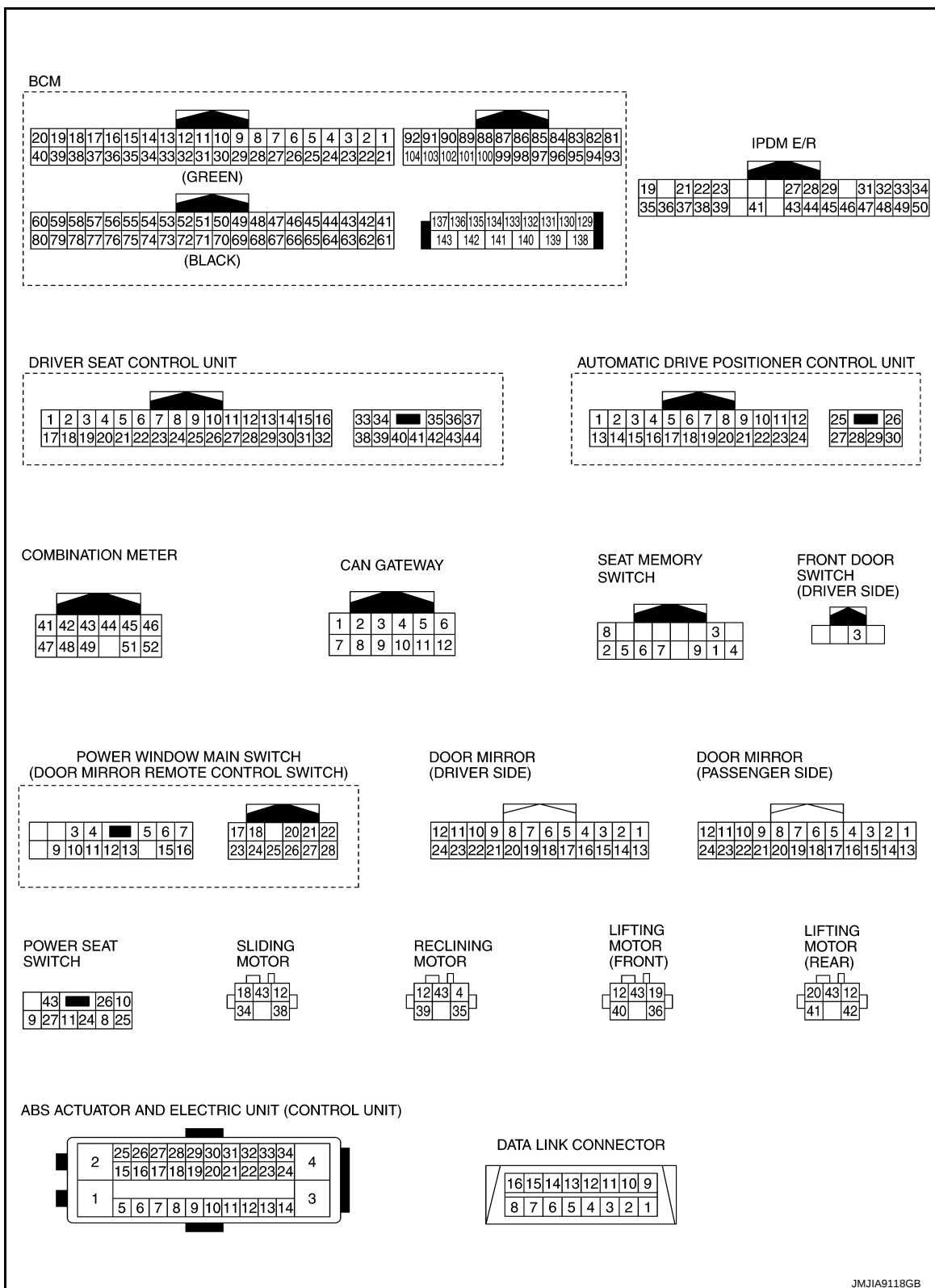
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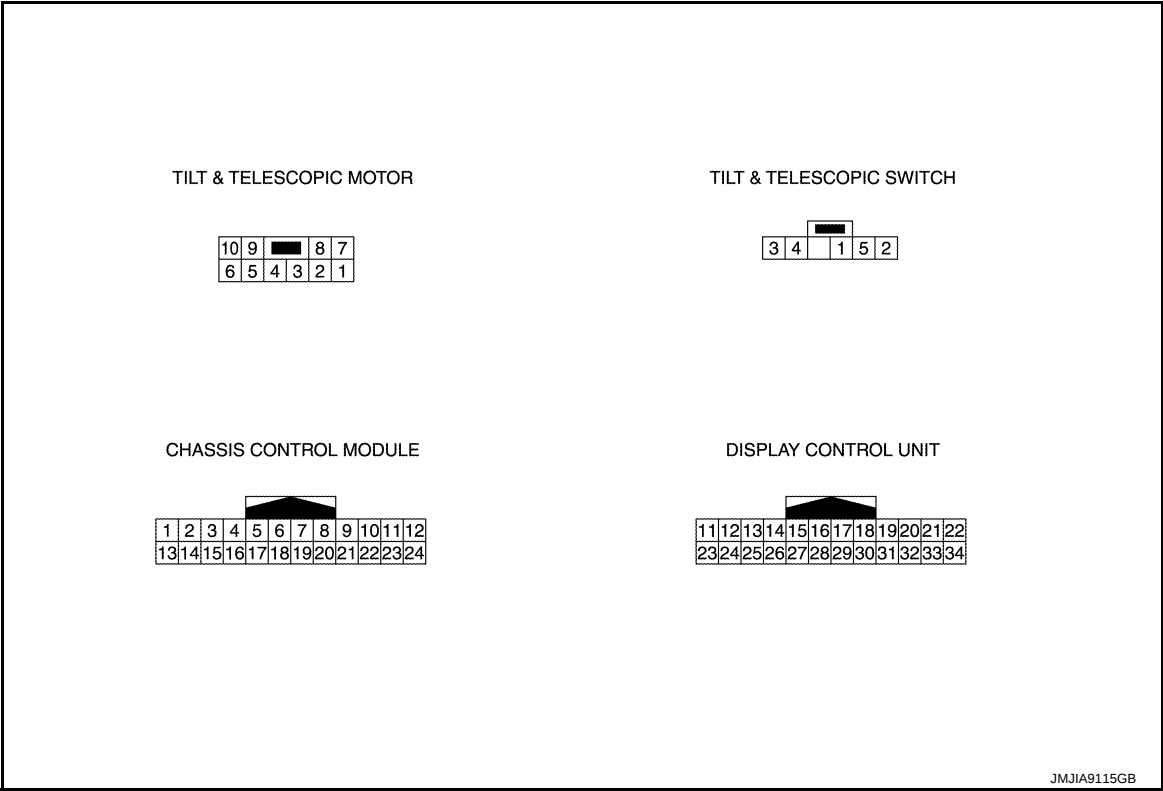


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MANUAL FUNCTION

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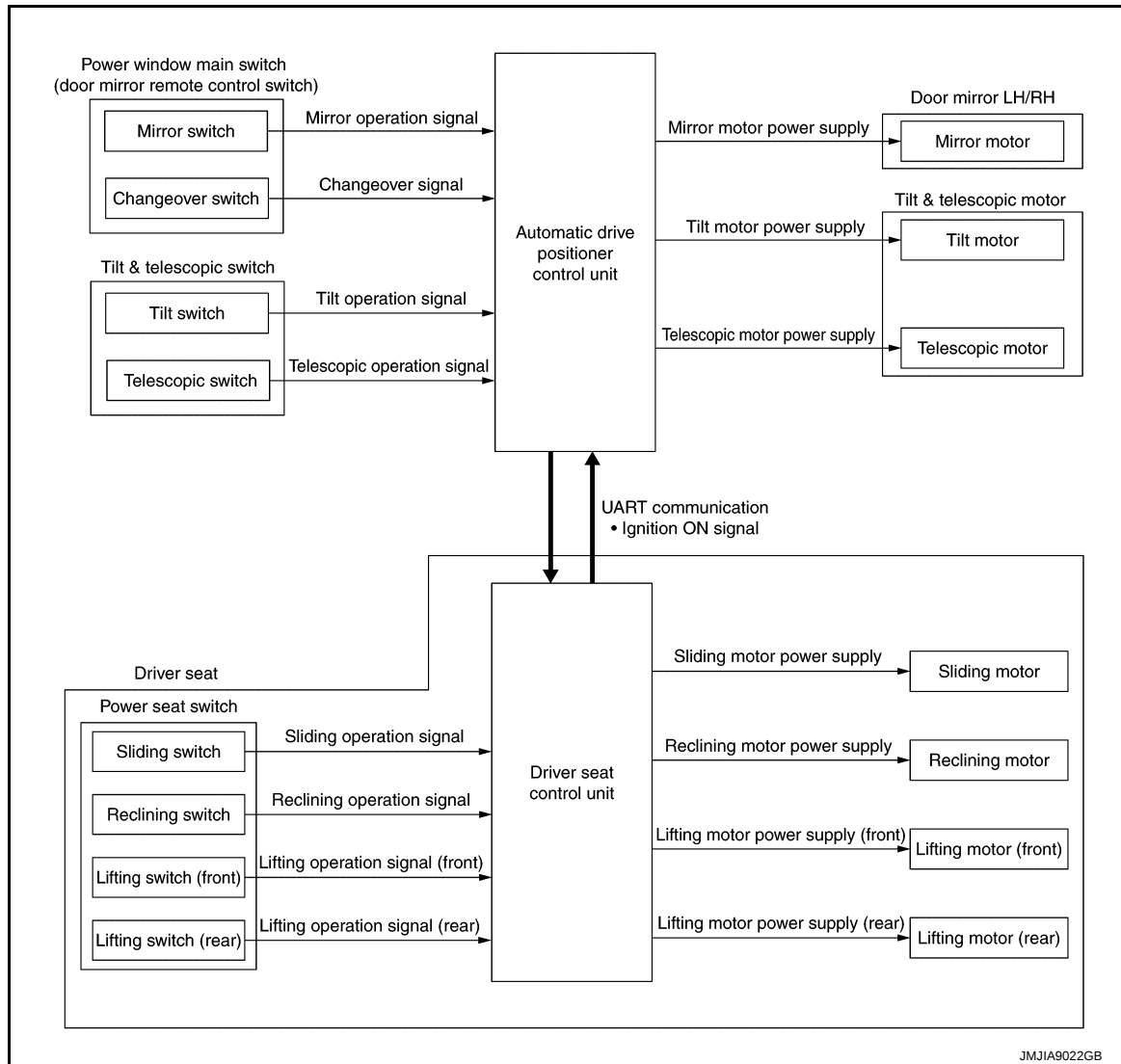
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MANUAL FUNCTION : System Description

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SYSTEM DIAGRAM



DESCRIPTION

The driving position (seat, steering column and door mirror position) can be adjusted manually with power seat switch, tilt & telescopic switch and door mirror remote control switch.

Operation procedure

1. Operate power seat switch, tilt & telescopic switch or door mirror remote control switch.
2. The driver seat, steering column or door mirror operates according to the operation of each switch.

NOTE:

Seat operates only up to two places at the same time.

DETAIL FLOW

Seat

Order	Input	Output	Control unit condition
1	Power seat switch (sliding, lifting, reclining)	—	The power seat switch signal is inputted to the driver seat control unit when the power seat switch is operated.
2	—	Motors (sliding, lifting, reclining)	The driver seat control unit outputs signals to each motor according to the power seat switch input signal.

SYSTEM

< SYSTEM DESCRIPTION >

NOTE:

The power seat can be operated manually regardless of the ignition switch position.

Tilt & Telescopic

Order	Input	Output	Control unit condition
1	Tilt & telescopic switch	—	The tilt & telescopic switch signal is inputted to the automatic drive positioner control unit when the tilt & telescopic switch is operated.
2	—	Motors (Tilt, telescopic)	The automatic drive positioner control unit actuates each motor according to the operation of the tilt & telescopic switch.

NOTE:

The tilt & telescopic can be operated manually when ignition switch is in either ACC or ON position.

Door Mirror

Order	Input	Output	Control unit condition
1	Door mirror remote control switch	—	The door mirror remote control switch signal is inputted to the automatic drive positioner control unit when the door mirror remote control switch is operated.
2	—	Motors (Door mirror motor)	The automatic drive positioner control unit actuates each motor according to the operation of the door mirror remote control switch.

NOTE:

The door mirrors can be operated manually when ignition switch is in either ACC or ON position.

MEMORY FUNCTION

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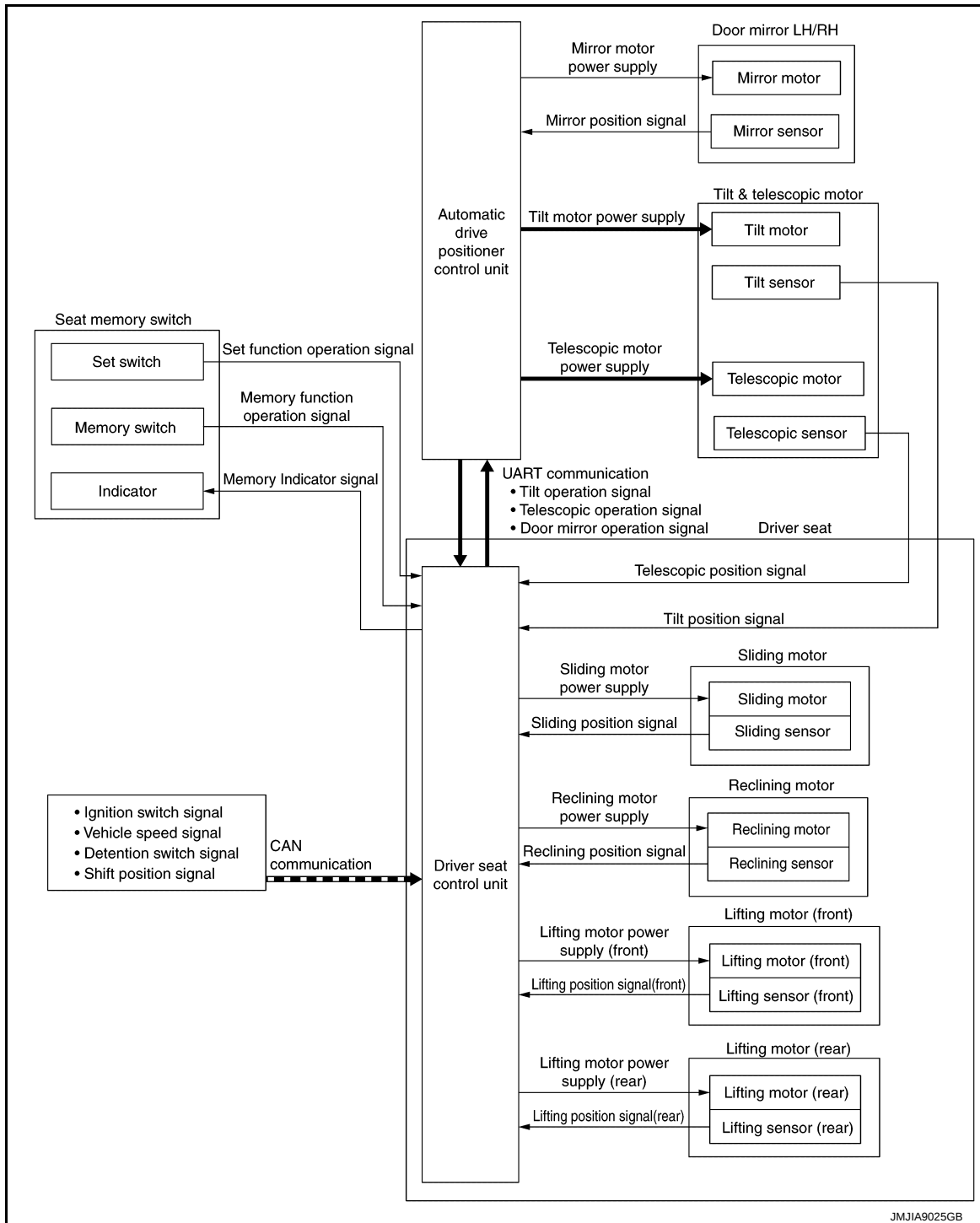
SYSTEM

< SYSTEM DESCRIPTION >

MEMORY FUNCTION : System Description

INFOID:000000011284139

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
IPDM E/R	Detention switch signal

SYSTEM

< SYSTEM DESCRIPTION >

Component	Signal
BCM	Ignition switch signal
ECM	Shift position signal

DESCRIPTION

The driver seat control unit can store the optimum driving positions (seat, steering column and door mirror position) for 2 people. If the front seat position is changed, one-touch (pressing desired memory switch) operation allows changing to the other driving position.

NOTE:

Further information for the memory storage procedure. Refer to [ADP-62, "Description"](#).

Operation Procedure

1. Apply parking brake.
2. Shift position P position.
3. Push desired memory switch.
4. Driver seat, steering and door mirror will move to the memorized position.

Operation Condition

Satisfy all of the following items. The memory function is not performed if these items are not satisfied.

Item	Request status
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
A/T shift selector	P position
Memory function	Registered
Vehicle speed	0 km/h (0 MPH)
CONSULT	Not connected

Detail Flow

Order	Input	Output	Control unit condition
1	Memory switch	—	The memory switch signal is inputted to the driver seat control unit when memory switch 1 or 2 is operated.
2	—	Motors (Seat, Steering, door mirror)	Driver seat control unit operates each motor of seat when it recognizes the memory switch pressed for 0.5 second or more and requests each motor operation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor.
		Memory switch Indicator	Driver seat control unit requests the flashing of memory indicator while either of the motors is operating. The driver seat control unit illuminates the memory indicator.
3	Sensors (Seat, steering column, door mirror)	—	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirror are monitored with each sensor signal. Driver seat control unit stops the operation of each motor when each part reaches the recorded address.
4	—	Memory switch Indicator	Driver seat control unit requests the illumination of memory indicator after all motors stop. The driver seat control unit illuminates the memory indicator for 5 seconds.

EXIT ASSIST FUNCTION

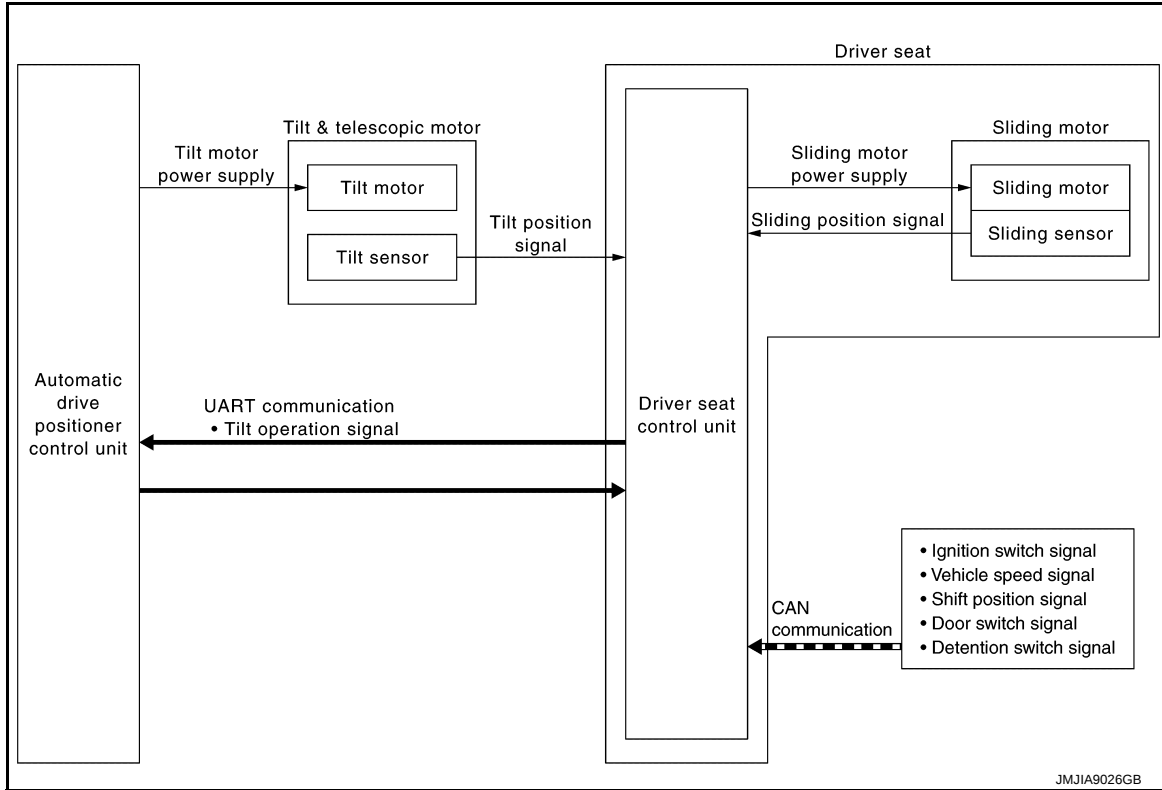
SYSTEM

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EXIT ASSIST FUNCTION : System Description

INFOID:000000011284140

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	- Ignition switch signal - Door switch signal
ECM	Shift position signal
IPDM E/R	Detention switch signal

DESCRIPTION

- When exiting, the condition is satisfied, the seat is moved backward 40 mm (1.57 in) from normal sitting position and the steering is moved to the most upper position.
- The seat slide amount and the steering operation at entry/exit operation can be changed.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to [ADP-63, "Description"](#).

Operation Procedure

- Shift position P position.
- Open the driver door with ignition switch in OFF position.
- Driver seat and steering column will move to the exiting position.

Operation Condition

Satisfy all of the following items. The exit assist function is not performed if these items are not satisfied.

SYSTEM

< SYSTEM DESCRIPTION >

Item	Request status
Ignition position	OFF
System setting [Entry/exit assist function (seat/steering)]	ON
Initialization	Done
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror remote control switch • Set switch • Memory switch	OFF (Not operated)
A/T shift selector	P position
Handle position	LHD
Transmission	A/T
CONSULT	Not connected

Detail Flow

Order	Input	Output	Control unit condition
1	Door switch (Driver side)	—	Driver seat control unit receives door switch signal (driver side/ open) from BCM via CAN communication.
2	—	Motors (Sliding, tilt)	Driver seat control unit operates the seat sliding motor, which recognizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor to auto drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor for a constant amount.
3	Sensor (Sliding, tilt)	—	Each sensor monitors the operating positions of seat and steering, and then stops the operation of each motor when steering reaches to the tilt top position and seat reaches to the rear most position.

ENTRY ASSIST FUNCTION

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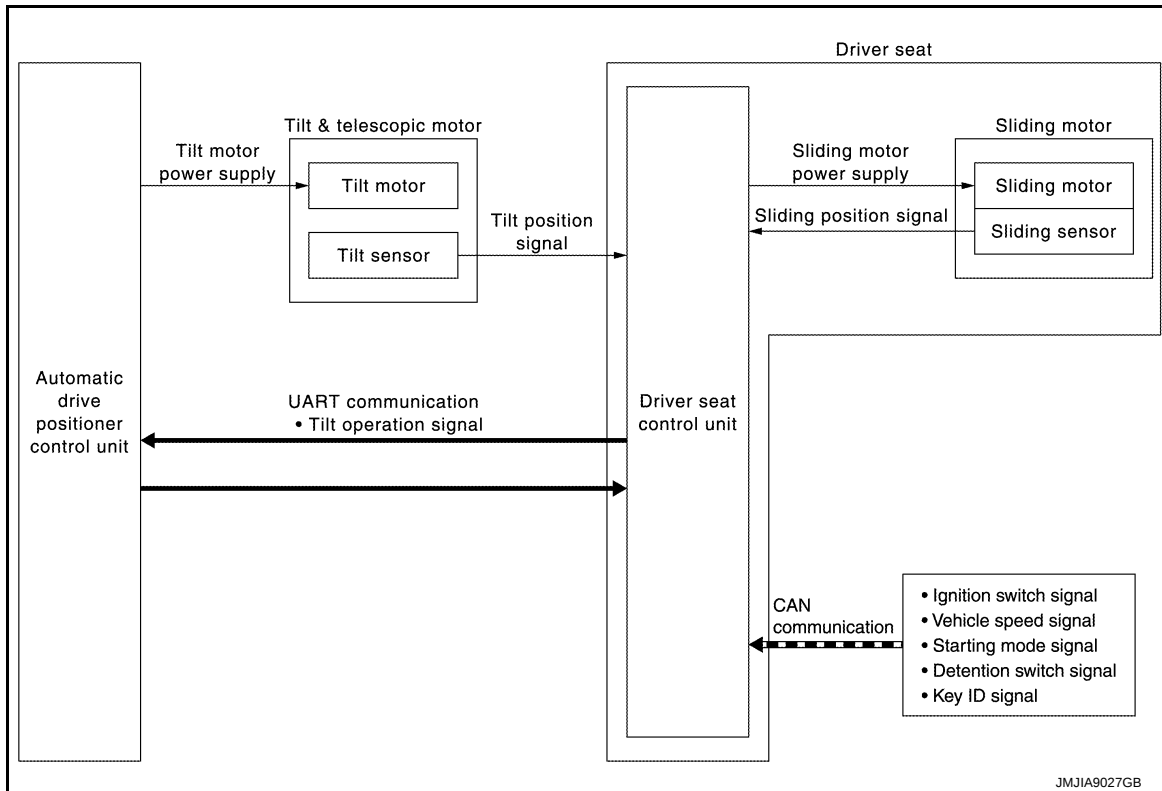
SYSTEM

< SYSTEM DESCRIPTION >

ENTRY ASSIST FUNCTION : System Description

INFOID:000000011284141

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	- Ignition switch signal - Key ID signal
IPDM E/R	Detention switch signal

DESCRIPTION

- This function allows the driver side seat and the steering column to return from the exiting position to the position before the exiting function is operated when the ignition switch is operated from OFF to ACC when the driver enters the vehicle.
- If the ignition switch is operated with any Intelligent Key other than that used before the exiting function is operated, the driver side seat and the steering column will return to the driver position registered for that Intelligent Key.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to [ADP-63, "Description"](#).

Operation Condition

- Turn ignition switch ACC.
- Driver seat and steering column will return from the exiting position to entry position.

Operation Procedure

Satisfy all of the following items. The entry assist function is not performed if these items are not satisfied.

SYSTEM

< SYSTEM DESCRIPTION >

Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Vehicle speed	0 Km/h (0 MPH)
Starter	OFF
Transmission	A/T
CONSULT	Not connected

Detail Flow

Order	Input	Output	Control unit condition
1	Ignition switch	—	Driver seat control unit receives the signals of [ignition switch signal] from BCM via CAN communication.
2	—	Motors (Sliding, tilt)	Driver seat control unit operates the sliding motor when the operating conditions are satisfied and requests the operations of tilt motor to automatic drive positioner control unit via UART communication. The automatic drive positioner operates each motor.
3	Sensors (Sliding, tilt)	—	Each sensor monitors the operating positions of seat and steering, and then stops the operation of each motor when each part reaches the recorded positions.

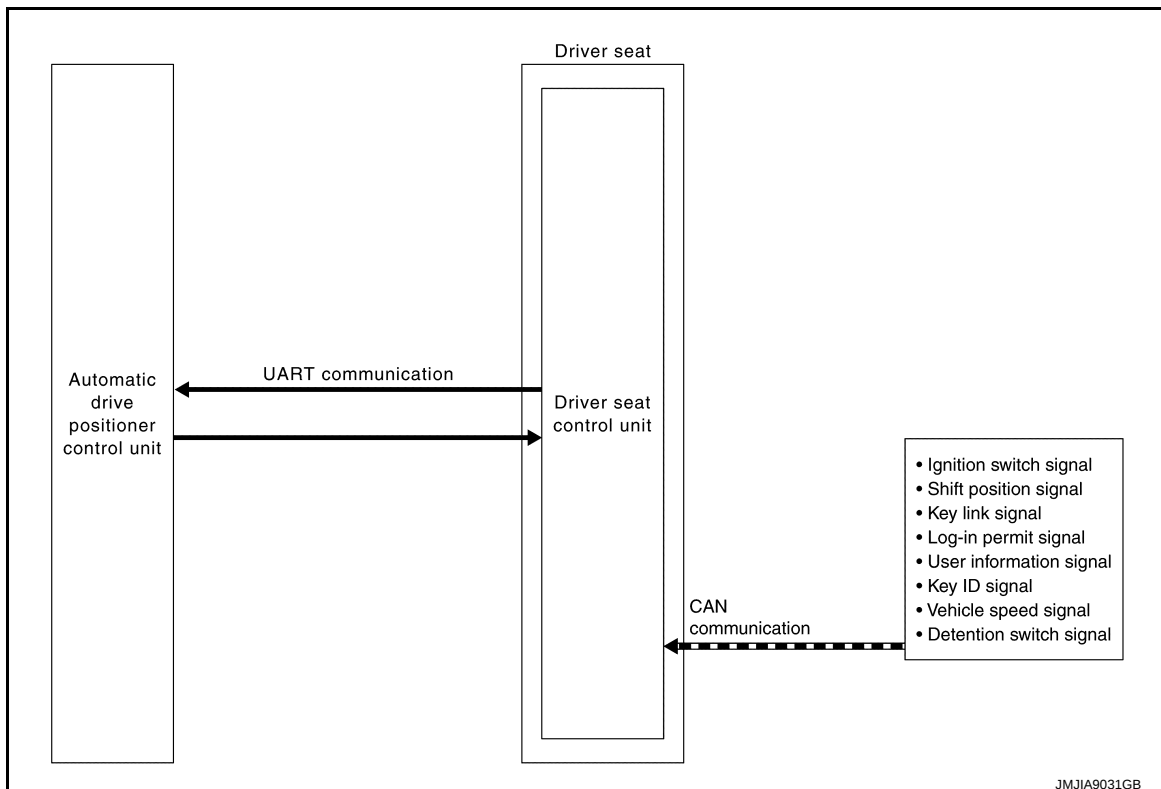
LOG-IN FUNCTION

LOG-IN FUNCTION : System Description

INFOID:0000000011284142

ADP

SYSTEM DIAGRAM



SYSTEM

< SYSTEM DESCRIPTION >

INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	- Ignition switch signal - Key ID signal
ECM	Shift position signal
Chassis control module	- Key link signal - Log-in permit signal
Display control unit	User information signal
IPDM E/R	Detention switch signal

DESCRIPTION

Log-in function is the function that registers the setting status of various systems and retrieves the status for each Intelligent Key as desired.

Registered information is automatically adjusted to the driving position (seat, steering column, and door mirror position) registered by unlocking the driver side door with the Intelligent Key (Intelligent Key interlock function) or by operating the user selection function on the display.

When user selection is performed by display operation, the user information registered with another Intelligent Key can also be retrieved.

For details on Intelligent Key interlock function, refer to [ADP-27. "INTELLIGENT KEY INTERLOCK FUNCTION : System Description"](#).

NOTE:

For the registration of the log-in function, the status is automatically registered as one of the following vehicle statuses when the ignition switch is turned to OFF. For details on registration, refer to [ADP-62. "Description"](#).

Item	Request status
Ignition position	ON
Driver side door	Close
Navigation system	Activated
CONSULT	Not connected

Operation Procedure

1. Turn ignition switch ON.
2. Push desired user change switch on display.
3. Driver seat, steering and door mirror will move to the memorized position.

Operation Condition

All of the following conditions must be satisfied in order to retrieve the registration information of the log-in function.

If one of the following conditions is not satisfied, the interlocked operation of the driving position for log-in function is interrupted.

Item	Request status
Ignition position	ON
Navigation system	Activated
Initialization	Done
Switch inputs - Power seat switch - Tilt & telescopic switch - Door mirror remote control switch - Set switch - Memory switch	OFF (Not operated)

SYSTEM

< SYSTEM DESCRIPTION >

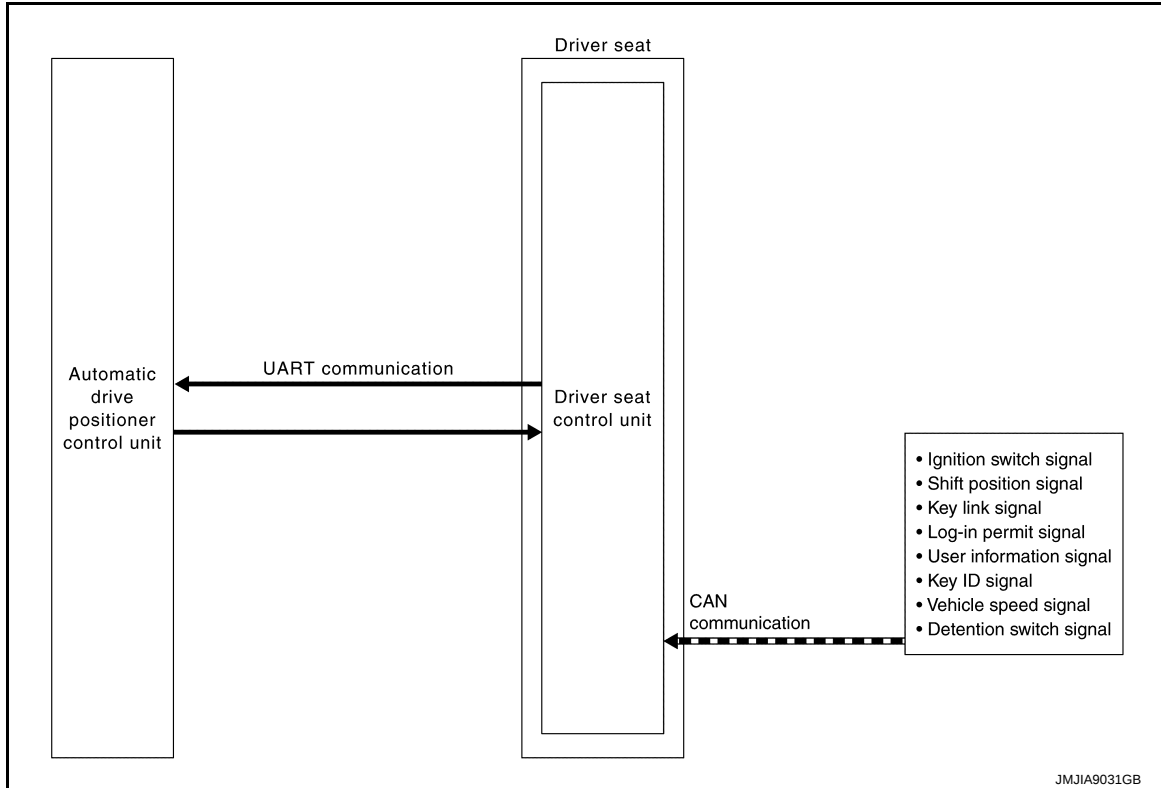
Item	Request status
A/T shift selector	P position
Log-in function memory	Registered
Vehicle speed	0 km/h (0 MPH)
CONSULT	Not connected

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000011284143

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	- Ignition switch signal - Key ID signal
ECM	Shift position signal
Chassis control module	- Key link signal - Log-in permit signal
Display control unit	User information signal
IPDM E/R	Detention switch signal

DESCRIPTION

- When ignition switch is OFF, and door unlock operation is performed using Intelligent Key or driver side door request switch or one touch unlock sensor, driver seat automatically adjusts to a driving position other than seat sliding. Seat sliding and steering column tilt perform return operation and are set to standby status.

SYSTEM

< SYSTEM DESCRIPTION >

- In standby status, when ignition switch is operated from OFF to ACC, return operation sets seat sliding and steering column tilt to a registered position.

NOTE:

When starter signal turns ON during return operation, the operation is interrupted, starter signal turns from ON to OFF, and operation restarts.

Operation Procedure

1. Unlock driver door by Intelligent Key or driver side door request switch or one touch unlock sensor.
2. Operation other than memory of seat sliding is performed. Seat sliding and steering column tilt perform exit assist operation.
3. Turn ignition switch ACC.
4. Driver seat and steering column will return from the exiting position to entry position.

Operation Condition

Satisfy all of the following items. The Intelligent Key interlock function is not performed if these items are not satisfied.

Item	Request status
Ignition position	OFF
Log-in function setting registration	Registered
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Transmission	A/T
CONSULT	Not connected

Detail Flow

Order	Input	Output	Control unit condition
1	• Door unlock signal (CAN) • Key ID signal (CAN)	—	When the following function is performed, the driver seat control unit transmits the unlock signal from BCM via CAN communication and receives the Key ID signal. • Unlock door: Intelligent Key • Unlock door: front request switch (driver side) • Unlock door: one touch unlock sensor
2	—	—	Driver seat control unit performs the seat slide and steering tilt move directly to the exit assist function. Other loads move to the exit assist function after performing log-in function.
3	—	—	Driver seat control unit performs the entry assist function.

Fail-Safe

INFOID:0000000011284144

The fail-safe mode may be activated if the following symptoms are observed.

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions operate normally.	CAN communication	U1000	ADP-64
	CONTROL UNIT	U1010	ADP-65
	EEPROM	B2130	ADP-74
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-72
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-66
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-68
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-70

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function

INFOID:0000000011284145

The auto drive positioner system can be checked and diagnosed for component operation with CONSULT.

APPLICATION ITEMS

Diagnostic mode [AUTO DRIVE POS.]	Description
WORK SUPPORT	Changes the setting of each function.
SELF-DIAG RESULTS	Performs self-diagnosis for the auto drive positioner system and displays the results.
DATA MONITOR	Displays input signals transmitted from various switches and sensors to driver seat control unit in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Drive each output device.
ECU IDENTIFICATION	Displays part numbers of driver seat control unit parts.

SELF-DIAGNOSIS RESULTS

Refer to [ADP-40, "DTC Index"](#).

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
SET SW	"On/Off"	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW 1	"On/Off"	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	"On/Off"	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW-FR	"On/Off"	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW-RR	"On/Off"	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW-FR	"On/Off"	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW-RR	"On/Off"	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW-UP	"On/Off"	×	×	ON/OFF status judged from the lifting switch front (up) signal.
LIFT FR SW-DN	"On/Off"	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW-UP	"On/Off"	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW-DN	"On/Off"	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW-UP	"On/Off"	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW-DN	"On/Off"	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW-RH	"On/Off"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CON SW-LH	"On/Off"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"On/Off"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"On/Off"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	"On/Off"	×	×	ON/OFF status judged from the tilt switch (up) signal.
TILT SW-DOWN	"On/Off"	×	×	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	"On/Off"	×	×	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	"On/Off"	×	×	ON/OFF status judged from the telescoping switch (backward) signal.
DETENT SW	"On/Off"	×	×	The selector lever position "OFF (P position) / ON (other than P position)" judged from the detention switch signal.
STARTER SW	"On/Off"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SLIDE PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U-D	"V"	—	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R-L	"V"	—	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U-D	"V"	—	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R-L	"V"	—	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TELESCO PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
VEHICLE SPEED	—	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
P RANG SW CAN	"On/Off"	×	×	ON/OFF status judged from the P range switch signal.
R RANGE (CAN)	"On/Off"	×	×	ON/OFF status judged from the R range switch signal.
DOOR SW-FL	"On/Off"	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW-FR	"On/Off"	×	×	ON/OFF status judged from the door switch (front passenger side) signal.
IGN ON SW	"On/Off"	×	×	ON/OFF status judged from the ignition switch signal.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
ACC ON SW	"On/Off"	×	×	ON/OFF status judged from the ACC switch signal.
KEY ON SW	"On/Off"	×	×	ON/OFF status judged from the key on switch signal.
KEYLESS ID	—	×	×	Key ID status judged from the key ID signal.
KYLS DR UNLK	"On/Off"	×	×	ON/OFF status judged from the driver side door unlock actuator output switch signal.
VHCL SPEED (ABS)	"On/Off"	×	×	ON/OFF status judged from vehicle speed signal.
HANDLE	"LHD"	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	"AT/MT"	×	×	AT/MT status judged from transmission.
STEERING STATUS	"LOCK/UN-LOCK"	×	×	LOCK/UNLOCK status judged from steering lock unit.
INITIAL STATE	DONE/YET	×	×	Displays the default status of the log-in function.
USER1 REGIST	DONE/YET	×	×	Displays the USER1 registration or non-registration status of the log-in function.
USER2 REGIST	DONE/YET	×	×	Displays the USER2 registration or non-registration status of the log-in function.
USER3 REGIST	DONE/YET	×	×	Displays the USER3 registration or non-registration status of the log-in function.
USER4 REGIST	DONE/YET	×	×	Displays the USER4 registration or non-registration status of the log-in function.
LOGIN USER	USER1/ USER2/ USER3/ USER4	×	×	Displays the current log-in user with the log-in function.
USER1 SW	On/Off	×	×	ON/OFF status judged from user1 change switch signal.
USER2 SW	On/Off	×	×	ON/OFF status judged from user2 change switch signal.
USER3 SW	On/Off	×	×	ON/OFF status judged from user3 change switch signal.
USER4 SW	On/Off	×	×	ON/OFF status judged from user4 change switch signal.
LOGIN USER CHANGE	PRBT/PRMT	×	×	Display the user change permission or inhibition status of the log-in function.
KEY LINK FUNCTION	On/Off	×	×	Displays the ON/OFF status of the Intelligent Key interlock function.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

Test item	Description
SEAT SLIDE	Activates/deactivates the sliding motor.
SEAT RECLINING	Activates/deactivates the reclining motor.
SEAT LIFTER FR	Activates/deactivates the lifting motor (front).
SEAT LIFTER RR	Activates/deactivates the lifting motor (rear).
TILT MOTOR	Activates/deactivates the tilt motor.
TELESCO MOTOR	Activates/deactivates the telescopic motor.
MIRROR MOTOR RH	Activates/deactivates the mirror motor (passenger side).
MIRROR MOTOR LH	Activates/deactivates the mirror motor (driver side).
MEMORY SW INDCTR	Turns ON/OFF the memory indicator.

WORK SUPPORT

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Work item	Content	Item
SEAT SLIDE VOLUME SET	The amount of seat sliding for entry/exit assist can be selected from 3 items.	40 mm
		80 mm
		150 mm
EXIT TILT SETTING	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	ON
		OFF
EXIT SEAT SLIDE SETTING	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	ON
		OFF

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000011284146

ECU	Reference
BCM	BCS-35, "Reference Value"
	BCS-60, "Fail-safe"
	BCS-61, "DTC Inspection Priority Chart"
	BCS-62, "DTC Index"

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DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:000000011284147

VALUES ON THE DIAGNOSIS TOOL

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Condition		Value/Status
SET SW	Set switch	Push	ON
		Release	OFF
MEMORY SW1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
		Release	OFF
SLIDE SW-FR	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW-RR	Sliding switch (backward)	Operate	ON
		Release	OFF
RECLN SW-FR	Reclining switch (forward)	Operate	ON
		Release	OFF
RECLN SW-RR	Reclining switch (backward)	Operate	ON
		Release	OFF
LIFT FR SW-UP	Lifting switch front (up)	Operate	ON
		Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
		Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
		Other than the above	OFF
MIR CON SW-DN	Mirror switch	Down	ON
		Other than the above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
		Other than the above	OFF
MIR CON SW-LH	Mirror switch	Left	ON
		Other than the above	OFF
MIR CHNG SW-R	Changeover switch	Right	ON
		Other than the above	OFF
MIR CHNG SW-L	Changeover switch	Left	ON
		Other than the above	OFF
TILT SW-UP	Tilt switch	Upward	ON
		Other than the above	OFF

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
TILT SW-DOWN	Tilt switch	Downward	ON
		Other than the above	OFF
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than the above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
		Other than the above	OFF
DETENT SW	A/T selector lever	P position	OFF
		Other than the above	ON
STARTER SW	Ignition position	Cranking	ON
		Other than the above	OFF
SLIDE PULSE	Seat sliding	Forward	The numeral value decreases *
		Backward	The numeral value increases*
		Other than the above	No change to numeral value*
RECLN PULSE	Seat reclining	Forward	The numeral value decreases*
		Backward	The numeral value increases *
		Other than the above	No change to numeral value*
LIFT FR PULSE	Seat lifter (front)	Up	The numeral value decreases *
		Down	The numeral value increases *
		Other than the above	No change to numeral value*
LIFT RR PULSE	Seat lifter (rear)	Up	The numeral value decreases *
		Down	The numeral value increases *
		Other than the above	No change to numeral value*
MIR/SEN RH U-D	Door mirror (passenger side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
TILT PULSE	Tilt position	Upward	The numeral value decreases *
		Downward	The numeral value increases *
		Other than the above	No change to numeral value*
TELESCO PULSE	Telescopic position	Forward	The numeral value decreases *
		Backward	The numeral value increases *
		Other than the above	No change to numeral value*
STEERING STATUS	Steering lock unit	LOCK	LOCK
		unlock	UNLOCK
VEHICLE SPEED	The condition of vehicle speed is displayed		km/h
P RANG SW CAN	A/T selector lever	P position	ON
		Other than the above	OFF
R RANGE (CAN)	A/T selector lever	R position	ON
		Other than the above	OFF

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DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

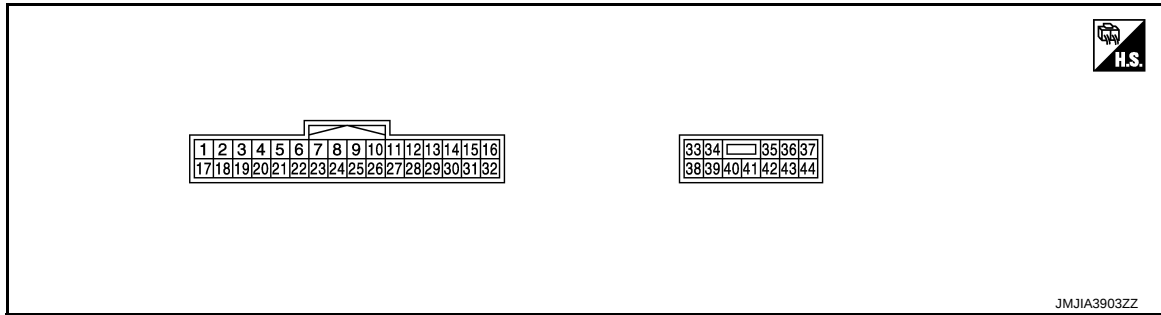
Monitor Item	Condition		Value/Status
DOOR SW-FL	Driver door	Open	ON
		Close	OFF
DOOR SW-FR	Passenger door	Open	ON
		Close	OFF
IGN ON SW	Ignition switch	ON position	ON
		Other than the above	OFF
ACC ON SW	Ignition switch	ACC or ON position	ON
		Other than the above	OFF
KEY ON SW	Intelligent Key	Inserted is key slot	ON
		Inserted is not key slot	OFF
KEYLESS ID	UNLOCK button of Intelligent Key is pressed		1,2,3,4or5
KYLS DR UNLK	Intelligent Key or driver side door request switch		ON
			OFF
VHCL SPEED (ABS)	CAN signal from ABS	Received	ON
		Not received	OFF
HANDLE	The BCM for handle position is displayed		LHD
TRANSMISSION	Transmission type is displayed		AT
			MT
INITIAL STATE	Displays the default status of the log-in function.		DONE
			YET
USER1 REGIST	Displays the USER1 registration status of the log-in function.		DONE
			YET
USER2 REGIST	Displays the USER2 registration status of the log-in function.		DONE
			YET
USER3 REGIST	Displays the USER3 registration status of the log-in function.		DONE
			YET
USER4 REGIST	Displays the USER4 registration status of the log-in function.		DONE
			YET
LOGIN USER	Displays the current log-in user with the log-in function.		USER1, USER2, USER3, USER4
USER1 SW	User1 change switch		ON
			OFF
USER2 SW	User2 change switch		ON
			OFF
USER3 SW	User3 change switch		ON
			OFF
USER4 SW	User4 change switch		ON
			OFF
LOGIN USER CHANGE	Display the user change permission or inhibition status of the log-in function.	Prohibit	PRBT
		Permit	PRMT
KEY LINK FUNCTION	Displays the ON/OFF status of the Intelligent Key interlock function.		ON
			OFF

*: The value at the position attained when the battery is connected is regarded as 32768.

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

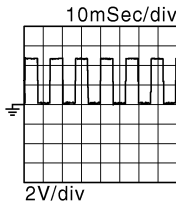
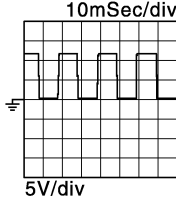
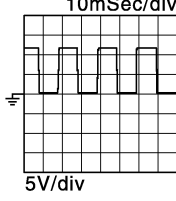
Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
1 (L)	—	CAN-H	—	—	—	—
2 (BR)	Ground	UART communi- cation (TX/RX)	Input/ output	Ignition switch ON		
4 (P)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Other than the above	0 or 5 V
5 (V)	Ground	Telescopic sen- sor signal	Input	Steering telescopic	Operate	
					Other than the above	0 or 5 V
6 (GY)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0 - 1 V
					Other than the above	4 - 6 V
7 (G)	Ground	Memory indica- tor 2 signal	Out- put	Memory indicator 2	Illuminate	0 - 1 V
					Other than the above	9 - 16 V

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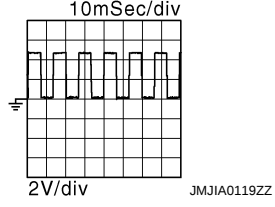
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
8 (V)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0 - 1 V
					Other than the above	9 - 16 V
9 (W)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0 - 1 V
					Other than the above	9 - 16 V
10 (O)	Ground	Lifting switch (front) down sig- nal	Input	Lifting switch (front)	Operate (down)	0 - 1 V
					Other than the above	9 - 16 V
11 (G)	Ground	Lifting switch (rear) down sig- nal	Input	Lifting switch (rear)	Operate (down)	0 - 1 V
					Other than the above	9 - 16 V
12 (SB)	Ground	Sensor power supply	Out- put	—		9 - 16 V
17 (P)	—	CAN-L	—	—		—
18 (LG)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Other than the above	0 or 5 V
19 (W)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	
					Other than the above	0 or 12 V
20 (GY)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Other than the above	0 or 12 V

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
21 (SB)	Ground	Tilt sensor signal	Input	Steering tilt	Operate	
					Other than the above	0 or 5 V
22 (O)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0 - 1 V
					Other than the above	4 - 6 V
23 (W)	Ground	Memory indicator 1 signal	Output	Memory indicator 1	Illuminate	0 - 1 V
					Other than the above	9 - 16 V
24 (P)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0 - 1 V
					Other than the above	9 - 16 V
25 (Y)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0 - 1 V
					Other than the above	9 - 16 V
26 (GY)	Ground	Lifting switch (front) up signal	Input	Lifting switch (front)	Operate (up)	0 - 1 V
					Other than the above	9 - 16 V
27 (L)	Ground	Lifting switch (rear) up signal	Input	Lifting switch (rear)	Operate (up)	0 - 1 V
					Other than the above	9 - 16 V
28 (Y)	Ground	Set switch signal	Input	Set switch	Press	0 - 1 V
					Other than the above	4 - 6 V
33 (R)	Ground	Battery power supply	Input	—		9 - 16 V
34 (V)	Ground	Sliding motor backward output signal	Output	Seat sliding	Operate (backward)	9 - 16 V
					Other than the above	0 - 1 V
35 (Y)	Ground	Reclining motor forward output signal	Output	Seat reclining	Operate (forward)	9 - 16 V
					Other than the above	0 - 1 V
36 (O)	Ground	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V

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DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
38 (P)	Ground	Sliding motor forward output signal	Out- put	Seat sliding	Operate (forward)	9 - 16 V
					Other than the above	0 - 1 V
39 (W)	Ground	Reclining motor backward output signal	Out- put	Seat reclining	Operate (backward)	9 - 16 V
					Other than the above	0 - 1 V
40 (GY)	Ground	Lifting motor (front) up output signal	Out- put	Seat lifting (front)	Operate (up)	9 - 16 V
					Other than the above	0 - 1 V
41 (L)	Ground	Lifting motor (rear) up output signal	Out- put	Seat lifting (rear)	Operate (up)	9 - 16 V
					Other than the above	0 - 1 V
42 (G)	Ground	Lifting motor (rear) down out- put signal	Out- put	Seat lifting (rear)	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V
43 (B)	Ground	Ground	—	—		0 - 1 V

Fail-Safe

INFOID:0000000011284148

The fail-safe mode may be activated if the following symptoms are observed.

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions operate normally.	CAN communication	U1000	ADP-64
	CONTROL UNIT (CAN)	U1010	ADP-65
	EEPROM	B2130	ADP-74
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-72
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-66
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-68
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-70

DTC Index

INFOID:0000000011284149

CONSULT display	Timing*1		Item	Reference page
	Current mal- function	Previous mal- function		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-64
CONTROL UNIT (CAN) [U1010]	0	1-39	Control unit	ADP-65
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-66

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Timing*1		Item	Reference page
	Current mal-function	Previous mal-function		
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-68
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-70
UART COMM [B2128]	0	1-39	UART communication	ADP-72
EEPROM [B2130]	0	1-39	EEPROM	ADP-74

*1:

- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset to 1 if any malfunction is detected again, the normal operation is resumed and the ignition switch is turned from OFF to ON.

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

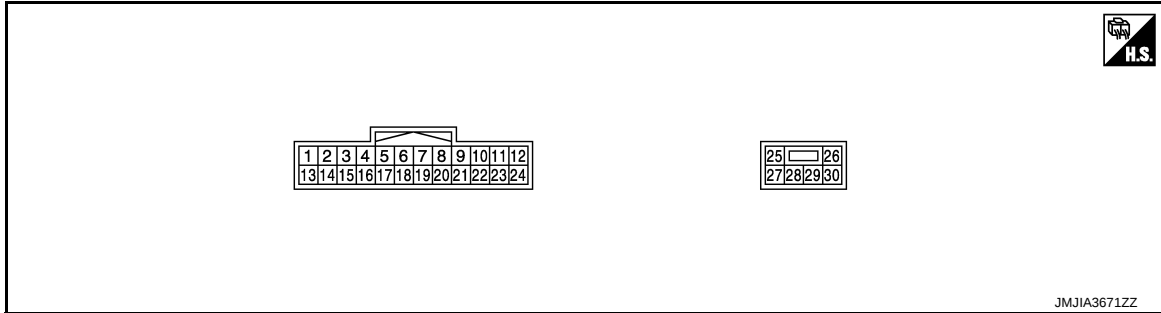
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000011284150

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage
+	-	Signal name	Input/ Output			
1 (Y)	Ground	Tilt switch up signal	Input	Tilt switch	Operate (up)	0 - 1 V
					Other than the above	4 - 6 V
2 (LG)	Ground	Changeover switch RH signal	Input	Changeover switch position	RH	0 - 1 V
					Neutral or LH	4 - 6 V
3 (G)	Ground	Mirror switch up signal	Input	Mirror switch	Operate (up)	0 - 1 V
					Other than the above	4 - 6 V
4 (Y)	Ground	Mirror switch left signal	Input	Mirror switch	Operate (left)	0 - 1 V
					Other than the above	4 - 6 V
5 (R)	Ground	Door mirror sensor (pas- senger side) up/down sig- nal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)
6 (GR)	Ground	Door mirror sensor (driver side) up/down signal	Input	Door mirror LH position		Change between 3.4 (close to peak) 0.6 (close to valley)
7 (GR)	Ground	Telescopic switch forward signal	Input	Telescopic switch	Operate (forward)	0 - 1 V
					Other than the above	4 - 6 V
8 (V)	Ground	UART communication (TX/RX)	Input/ Output	Ignition switch ON		

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage
+	-	Signal name	Input/ Output			
10 (W/B)	Ground	Door mirror motor (passenger side) up/right output signal	Output	Door mirror RH	Operate (up/right)	9 - 16 V
					Other than the above	0 - 1 V
11 (BR)	Ground	Door mirror motor (passenger side) down/left output signal	Output	Door mirror RH	Operate (down/left)	9 - 16 V
					Other than the above	0 - 1 V
12 (Y)	Ground	Door mirror motor (driver side) down/right output signal	Output	Door mirror (LH)	Operate (down/right)	9 - 16 V
					Other than the above	0 - 1 V
13 (LG)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0 - 1 V
					Other than the above	4 - 6 V
14 (W)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0 - 1 V
					Neutral or RH	4 - 6 V
15 (SB)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0 - 1 V
					Other than the above	4 - 6 V
16 (L)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0 - 1 V
					Other than the above	4 - 6 V
17 (L)	Ground	Door mirror sensor (passenger side) left/right signal	Input	Door mirror RH position		Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (B)	Ground	Door mirror sensor (driver side) left/right signal	Input	Door mirror LH position		Change between 0.6 (close to left edge) 3.4 (close to right edge)
19 (G)	Ground	Telescopic switch backward signal	Input	Telescopic switch	Operate (backward)	0 - 1 V
					Other than the above	4 - 6 V
20 (Y)	Ground	Ground (sensor)	—	—		0 - 1 V
21 (W)	Ground	Door mirror motor sensor power supply	Input	—		4 - 6 V
22 (SB)	Ground	Door mirror motor (passenger side) down/right output signal	Output	Door mirror (RH)	Operate (down/right)	9 - 16 V
					Other than the above	0 - 1 V
23 (P)	Ground	Door mirror motor (driver side) up/right output signal	Output	Door mirror (LH)	Operate (up/right)	9 - 16 V
					Other than the above	0 - 1 V

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage
+	-	Signal name	Input/ Output			
24 (W/B)	Ground	Door mirror motor (driver side) down/left output signal	Output	Door mirror (LH)	Operate (down/left)	9 - 16 V
					Other than the above	0 - 1 V
25 (SB)	Ground	Battery power supply	Input	—		9 - 16 V
26 (G)	Ground	Telescopic motor backward output signal	Output	Steering telescopic	Operate (backward)	9 - 16 V
					Other than the above	0 - 1 V
27 (W)	Ground	Tilt & telescopic sensor power supply	Output	—		9 - 16 V
28 (BR)	Ground	Tilt motor down output signal	Output	Steering tilt	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V
29 (L)	Ground	Tilt motor up output signal	Output	Steering tilt	Operate (up)	9 - 16 V
					Other than the above	0 - 1 V
		Telescopic motor forward output signal		Steering telescopic	Operate (forward)	9 - 16 V
					Other than the above	0 - 1 V
30 (B)	Ground	Ground (power)	—	—		0 - 1 V

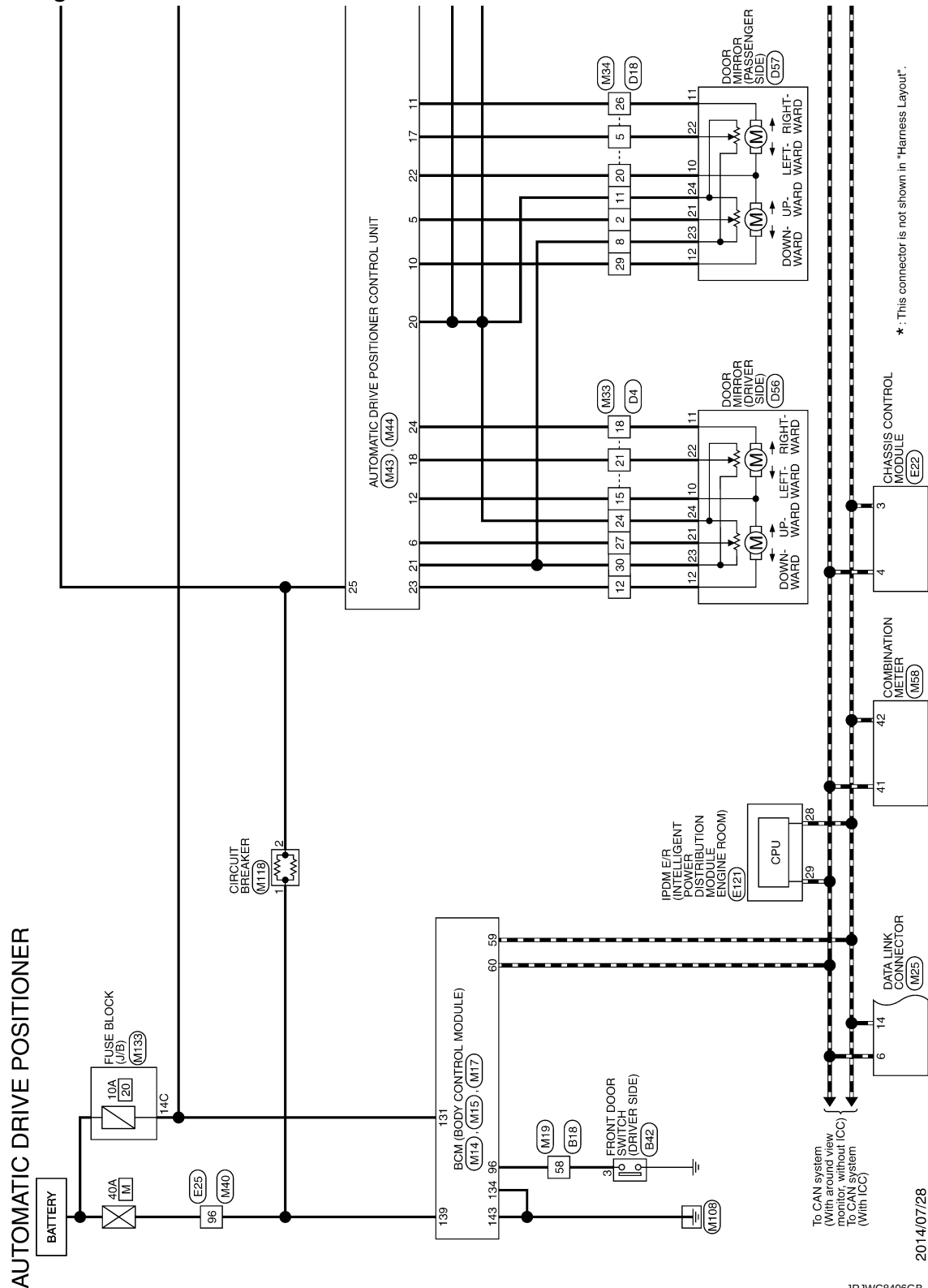
AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

WIRING DIAGRAM

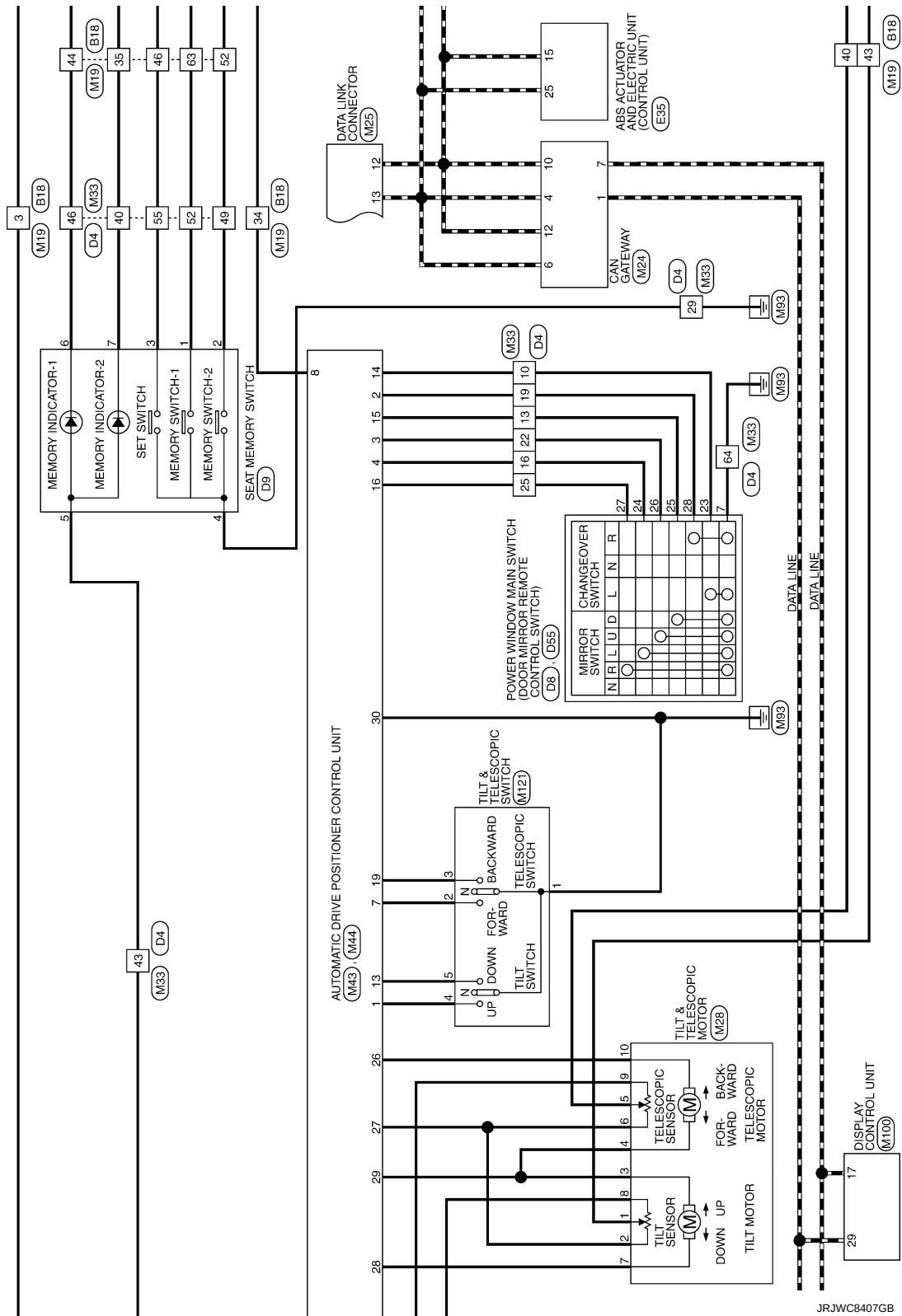
AUTOMATIC DRIVE POSITIONER SYSTEM

Wiring Diagram



AUTOMATIC DRIVE POSITIONER SYSTEM

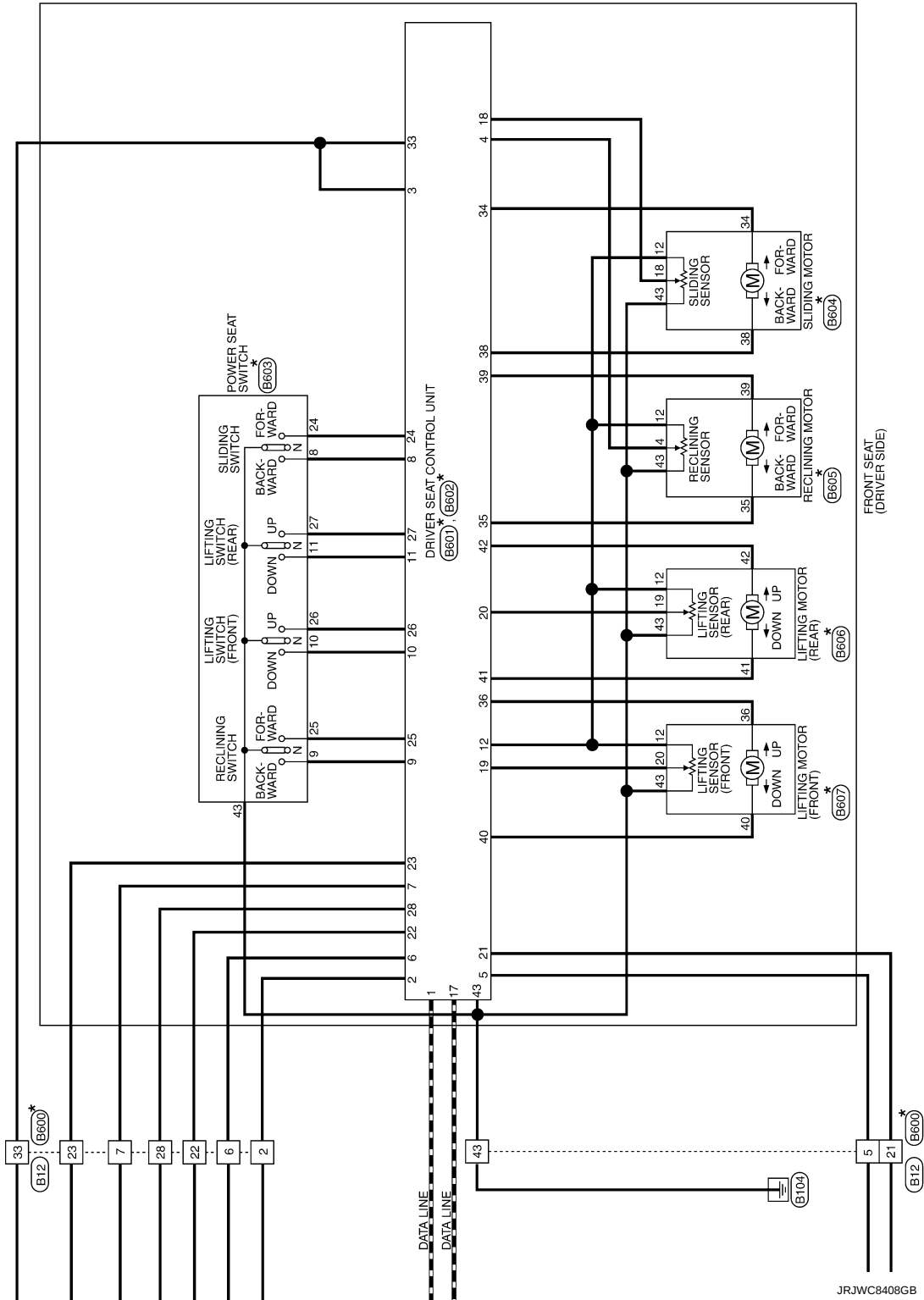
< WIRING DIAGRAM >



JRJWC8407GB

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



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AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER

Connector No.	B12
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



28	21	5	2		43	1	17	
23	7	33	22	45	6	47	48	46

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	LG	-
5	P	-
9	V	-
17	P	-
17	R	- [Without Gateway]
21	BG	- [With Gateway]
23	BG	-
28	R	-
33	L	-
43	B	-
45	G	-
46	BG	-
47	R	-
48	GR	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-
3	L	-
4	LG	-
6	R	-
7	V	-
8	LG	-
9	BR	-
10	P	-
11	BG	-
12	LG	-
13	GR	-
24	Y	-
25	W	-
31	B	-
32	B	-
33	B	-
34	LG	-
35	P	-
36	W	-
37	SB	-
38	LG	-
40	P	-
41	SB	-
42	BR	-
43	BG	-
44	BG	-
46	R	-
51	SB	-
52	V	-
54	R	-
55	R	-
57	W	-
58	V	-
59	GR	-
62	BG	-
63	BR	-
64	Y	-
65	W	-
70	R	-
71	W	-
72	B	-
74	L	-
75	R	-
76	BR	-
77	B	-
81	B	-

83	BG	-
84	L	-
85	R	-
86	B	-
88	G	-
91	GR	-
94	GR	-
96	Y	-
97	V	-
98	BR	-

Connector No.	B42
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	TH04FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250
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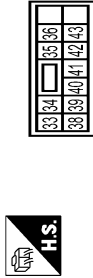
AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER

28	Y	SET SW
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Connector No.	B602
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
33	R	BAT (PTC)
34	V	SLIDE MOTOR (BACKWARD)
35	Y	RECLINER MOTOR (FORWARD)
36	O	TILT MOTOR (DOWNWARD)
38	P	SLIDE MOTOR (FORWARD)
39	W	RECLINER MOTOR (BACKWARD)
40	GY	TILT MOTOR (UPWARD)
41	L	REAR LIFTER MOTOR (UPWARD)
42	G	REAR LIFTER MOTOR (DOWNWARD)
43	B	GND

Connector No.	B603
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
9	V	SLIDE SW (BACKWARD)
10	W	RECLINER SW (BACKWARD)
11	O	TILT SW (DOWNWARD)
24	G/B	LIFTER SW (DOWNWARD)
25	P	SLIDE SW (FORWARD)
26	Y	RECLINER SW (FORWARD)
28	GY	TILT SW (UPWARD)

27	L	LIFTER SW (UPWARD)
43	B	GND

Connector No.	B604
Connector Name	SLIDING MOTOR
Connector Type	YAZAKI 7123-1460



Terminal No.	Color Of Wire	Signal Name [Specification]
12	SB	-
18	LG	-
34	V	-
38	P	-
43	B	-

Connector No.	B605
Connector Name	RECLINING MOTOR
Connector Type	YAZAKI 7123-1460



Terminal No.	Color Of Wire	Signal Name [Specification]
4	P	-
12	SB	-
35	Y	-
39	W	-
43	B	-

Connector No.	B606
Connector Name	LIFTING MOTOR (REAR)
Connector Type	YAZAKI 7123-1460



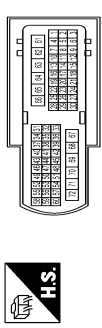
Terminal No.	Color Of Wire	Signal Name [Specification]
12	SB	-
19	GY	-
20	GY	-
41	L	-
42	G	-
43	B	-

Connector No.	B607
Connector Name	LIFTING MOTOR (FRONT)
Connector Type	YAZAKI 7123-1460



Terminal No.	Color Of Wire	Signal Name [Specification]
12	SB	-
19	W	-
20	-	-
36	O	-
40	GY	-
43	B	-

Connector No.	D4
Connector Name	WIPE TO WIRE
Connector Type	NH60FW-TS12



Terminal No.	Color Of Wire	Signal Name [Specification]
6	V	-
8	G	-
9	GR	-
10	Y	-
11	SHIELD	-
12	BG	-
13	L	-
14	B	-
15	Y	-
16	GR	-
17	R	-
18	GR	-
19	R	-
20	W	-
21	LG	-
22	W	-
23	L	-
24	G	-
25	BR	-
26	R	-
27	BR	-
28	V	-
29	B	-
30	W	-
31	P	-
32	Y	-
33	BR	-
34	L	-
35	R	-
36	GR	-
37	G	-
40	P	-
41	L	-
43	BG	-
44	Y	-
46	W	-

JRJWC8410GB

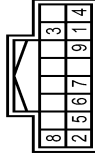
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AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

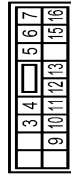
AUTOMATIC DRIVE POSITIONER

Connector No.	D9	SEAT MEMORY SWITCH
Connector Name	TH16FW-NH	
Connector Type		
47	R	-
49	BR	-
50	B	-
52	V	-
53	GR	-
55	GR	-
56	BR	-
57	R	-
58	L	-
59	V	-
60	G	-
61	BG	-
62	Y	-
63	SB	-
64	B	-
65	Y	-
66	BR	-
68	Y	-
69	Y	-
70	W	-
71	LG	-
72	P	-



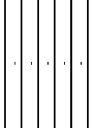
Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	BR	-
3	GR	-
4	B	-
5	BG	-
6	W	-
7	P	-
8	L	-
9	G	-

Connector No.	D8	POWER WINDOW MAIN SWITCH
Connector Name	NS16FW-CS	
Connector Type		



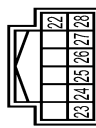
Terminal No.	Color Of Wire	Signal Name [Specification]
3	V	ENCODER +
4	Y	+B
5	G	DN
6	L	UP
7	B	-
9	BR	IGN
10	B	ENCODER GND
11	GR	ENCODER SIG1
12	BR	ENCODER SIG2
13	SB	CON1
15	V	LOCK SW
16	Y	UNLOCK SW

17	B	-
18	W	-
19	B	-
20	G	-
21	SHIELD	-
22	GR	-
23	BG	-
24	B	-
25	BR	-
26	V	-
27	G	-
28	V	-
29	Y	-
30	R	-
49	LG	-
52	P	-
55	L	-
56	Y	-
57	R	-
58	SB	-
59	R	-
60	G	-
63	B	-
64	Y	-
65	BR	-
66	GR	-
69	W	-
70	L	-
71	BG	-
72	Y	-



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	R	-
3	G	-
5	B	-
6	W	-
7	L	-
10	Y	-
11	GR	-
12	BG	-
13	V	-
14	B	-
17	SHIELD	-
18	R	-
19	B	-
21	BR	-
22	LG	-
23	W	-
24	G	-

Connector No.	D55	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Name	TH12FW-NH	
Connector Type		



Terminal No.	Color Of Wire	Signal Name [Specification]
22	V	-
23	Y	-
24	GR	-
25	L	-

26	W	-
27	BR	-
28	R	-

Connector No.	D56	DOOR MIRROR (DRIVER SIDE)
Connector Name	TH24MW-NH	
Connector Type		



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	R	-
3	G	-
5	B	-
6	W	-
7	L	-
10	Y	-
11	GR	-
12	BG	-
13	V	-
14	B	-
17	SHIELD	-
18	R	-
19	B	-
21	BR	-
22	LG	-
23	W	-
24	G	-

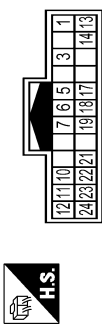
JRJWC8411GB

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

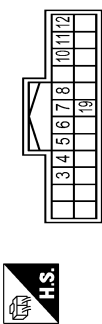
AUTOMATIC DRIVE POSITIONER

Connector No.	D57
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	B	-
4	R	-
5	GR	-
6	LG	-
7	SB	-
8	G	-
9	V	-
10	Y	-
11	Y	-
12	Y	-
13	Y	-
14	B	-
15	G	-
16	B	-
17	SHIELD	-
18	G	-
19	B	-
20	P	-
21	P	-
22	BR	-
23	W	-
24	GR	-

Connector No.	E22
Connector Name	CHASSIS CONTROL MODULE
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	CAN-L
2	P	CAN-H
3	L	DRIVE MODE SELECT SW (UP)
4	L	DRIVE MODE SELECT SW (UP)
5	V	DRIVE MODE SELECT SW (UP)

6	G	DRIVE MODE SELECT SW (DOWN)
7	W	CHASSIS COMM-L
8	W	CHASSIS COMM-L
9	G	IGN
10	L	CHASSIS COMM-H
11	L	CHASSIS COMM-H
12	B	GROUND
13	B	CHASSIS COMM-H
14	L	CHASSIS COMM-H
15	L	CHASSIS COMM-H

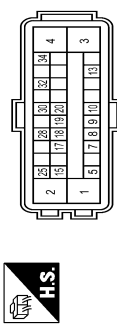
Connector No.	E25
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	LG	-
4	BR	-
5	V	-
6	V	-
7	L	-
8	L	-
9	BR	-
10	BR	-
11	L	-
12	GR	-
13	W	-
14	B	-
15	SB	-
16	Y	-
17	BR	-
18	P	-
19	Y	-
20	GR	-
21	GR	-
22	R	-
23	V	-
24	L	-
25	Y	-
26	SB	-
27	Y	-
28	SB	-
29	Y	-
30	SB	-
31	Y	-
32	GR	-
33	GR	-
34	R	-
35	V	-
36	L	-
37	Y	-
38	Y	-
39	Y	-
40	SB	-
41	LG	-
42	Y	-
43	W	-
44	W	-
45	W	-
46	B	-
47	G	-

48	SHIELD	-
49	R	-
50	BR	-
51	L	-
52	W	-
53	V	-
54	P	-
55	W	-
56	SB	-
57	SB	-
58	B	-
59	W	-
60	W	-
61	R	-
62	SB	-
63	LG	-
64	Y	-
65	SB	-
66	GR	-
67	LG	-
68	BG	-
69	LG	-
70	V	-
71	LG	-
72	V	-
73	G	-
74	BR	-
75	V	-
76	P	-
77	P	-
78	SB	-
79	SB	-
80	R	-
81	R	-
82	BG	-
83	L	-
84	G	-
85	Y	-
86	Y	-
87	Y	-
88	Y	-
89	Y	-
90	Y	-
91	G	-
92	Y	-
93	GR	-
94	GR	-
95	BG	-
96	W	-
97	LG	-
98	L	-
99	P	-
100	SHIELD	-

Connector No.	E35
Connector Name	ABS ACTUATOR AND ELECTRIC ANT (CONTROL UNIT)
Connector Type	SAZ30FB-SJ24-U



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	B	GROUND
3	G	GROUND
4	Y	VALVE BATTERY
5	LG	MOTOR BATTERY
6	GR	STOP LAMP SW SIGNAL
7	GR	RR LH WHEEL SENSOR POWER SUPPLY
8	G	RR LH WHEEL SENSOR SIGNAL
9	BR	FR RH WHEEL SENSOR POWER SUPPLY
10	GR	FR RH WHEEL SENSOR SIGNAL
11	R	VACUUM SENSOR SIGNAL
12	P	CAN-L
13	P	RR RH WHEEL SENSOR SIGNAL
14	Y	RR RH WHEEL SENSOR POWER SUPPLY
15	V	FR RH WHEEL SENSOR SIGNAL
16	SB	FR LH WHEEL SENSOR SIGNAL
17	SB	FR LH WHEEL SENSOR POWER SUPPLY
18	BG	CAN-H
19	L	VACUUM SENSOR POWER SUPPLY
20	L	VACUUM SENSOR SIGNAL
21	G	VACUUM SENSOR POWER SUPPLY
22	R	VDC OFF SW SIGNAL
23	SHIELD	VACUUM SENSOR GROUND
24	G	IGN

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER

Connector No.	IE121
Connector Name	IPDM/ER INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH32FW-NH

Terminal No.	19	22	23	27	28	29	31	33	34
Wire	35	36	37	38	41	43	44	46	

Terminal No.	Wire	Signal Name [Specification]
19	P	-
22	BG	-
23	LG	-
27	GR	-
28	P	-
29	L	-
31	G	-
33	SB	-
34	Y	-
35	G	-
36	SB	-
37	GR	-
38	BR	-
41	GR	-
43	V	-
44	GR	-
46	R	-

Connector No.	M14
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								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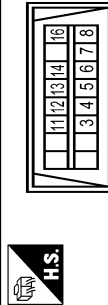
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1	L	CAN-H
2	W	BATTERY
3	L	CAN-H
4	B	GND
5	L	CAN-H
6	P	IGN
7	R	CAN-L
8	GND	CAN-L
9	B	CAN-L
10	R	CAN-L
11	B	CAN-L
12	R	CAN-L

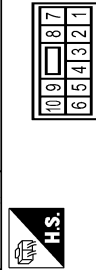
Connector No.	M25
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	AV COMM (L)
4	B	EARTH
5	B	EARTH
6	L	CAN-H
7	V	KLING
8	W	IGN SW

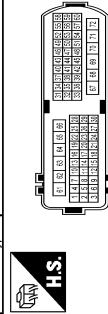
11	LG	AV COMM (H)
12	R	CAN-L
13	L	CAN-H
14	P	CAN-L
16	W	POWER

Connector No.	M28
Connector Name	TYLT & TELESCOPIC MOTOR
Connector Type	NS10FW-GS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	W	-
3	L	-
4	L	-
5	P	-
6	W	-
7	BR	-
8	Y	-
9	Y	-
10	G	-

Connector No.	M33
Connector Name	WIRE TO WIRE
Connector Type	NH60MW-TS12



Terminal No.	Color Of Wire	Signal Name [Specification]
6	R	-
8	GR	-
9	GR	-

10	W	SHIELD
11	SHIELD	-
12	P	-
13	SB	-
14	LG	-
15	Y	-
16	Y	-
17	P	-
18	WB	-
19	LG	- [With DRPO]
20	V	- [Without DRPO]
21	B	-
22	BG	- [Without DRPO]
23	G	- [With DRPO]
24	L	-
25	Y	-
26	BG	- [Without DRPO]
27	L	- [With DRPO]
28	Y	-
29	GR	-
30	V	-
31	B	-
32	SB	-
33	L	-
34	BR	-
35	LG	-
36	W	-
37	B	-
40	P	-
41	SB	-
43	Y	-
44	BG	-
46	BR	-
47	G	-
49	V	-
50	B	-
52	BR	-
53	B	-
55	BG	-
56	LG	-
57	V	-
58	R	-
59	G	-
60	L	-
61	G	-
62	R	-
63	V	-

64	B	-
65	R	-
66	BR	-
68	P	-
69	V	-
70	W	-
71	LG	-
72	V	-

Connector No.	M34
Connector Name	WIRE TO WIRE
Connector Type	NH60MW-TS12



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
5	L	-
6	R	-
8	W	-
9	GR	-
10	V	-
11	Y	-
13	LG	-
14	W	-
16	G	-
17	B	-
18	W	-
19	B	-
20	SB	- [With DRPO]
21	Y	- [Without DRPO]
22	B	-
23	BG	- [Without DRPO]
24	P	- [With DRPO]
25	G	-
26	BG	- [Without DRPO]
27	R	- [With DRPO]
28	SB	-

JRJWC8414GB

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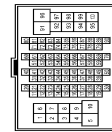
AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER

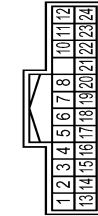
Terminal No.	Signal Name [Specification]
29	BG - [Without DRPO]
30	W/B - [With DRPO]
31	L -
32	P -
33	V -
34	B -
35	Y -
36	SB -
37	G -
38	L -
39	Y -
40	GR -
41	L -
42	BR -
43	W -
44	G -
45	R -
46	B -
47	SHIELD -
48	R -
49	BR -
50	Y -
51	L -
52	W -
53	G -
54	P -
55	BG -
56	GR -
57	B -
58	SB -
59	W/B -
60	V -
61	L -
62	P -
63	B -
64	R -
65	BR -
66	Y -
67	L -
68	W -
69	G -
70	R -
71	SB -
72	W -

Connector No.	Signal Name [Specification]
M40	WIRE TO WIRE
TH60MW-CS16-TM4	



Terminal No.	Signal Name [Specification]
2	GR
3	L
4	V
6	W/B
7	V
10	W
11	W
12	B
13	GR
14	B
15	SB
16	B
17	LG
18	B
31	W

Connector No.	Signal Name [Specification]
M43	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
TH24FW-NH	



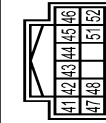
Terminal No.	Signal Name [Specification]
1	Y
2	LG
3	G
4	V
5	R
6	GR
7	GR
8	V
10	W/B
11	BR
12	Y
13	LG
14	W
15	SB
16	L
17	L
18	B
19	G
20	Y
21	W
22	SB
23	P
24	W/B

Connector No.	Signal Name [Specification]
M44	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
NS06FW-CS	



Terminal No.	Signal Name [Specification]
25	SB
26	G
27	W
28	BR
29	L
30	B

Connector No.	Signal Name [Specification]
M58	COMBINATION METER
TH12FW-NH	



Terminal No.	Signal Name [Specification]
41	L
42	P
43	B
44	Y
45	W
46	R
47	LG
48	SB
51	BR
52	B

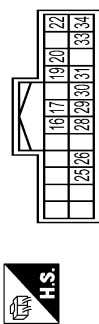
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AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER

Connector No.	M100
Connector Name	DISPLAY CONTROL UNIT
Connector Type	TH24FW-NH



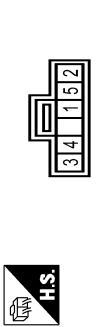
Terminal No.	Color Of Wire	Signal Name [Specification]
16	SB	AV COMM (L)
17	P	CANL
19	R	DIMMER SIGNAL
20	BR	REVERSE SIGNAL
22	B	GND
25	SB	-
26	BR	CAMERA SWITCH SIGNAL
28	LG	AV COMM (H)
29	L	CANH
30	R	IGN
31	R	VEHICLE SPEED SIGNAL (8-PULSE)
33	SB	ACC
34	Y	BAT

Connector No.	M118
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-LC



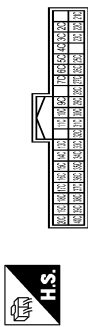
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	SB	-

Connector No.	M121
Connector Name	TILT & TELESCOPIC SWITCH
Connector Type	TK08FGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
2	GR	TELESCOPIC FR
3	G	TELESCOPIC RR
4	Y	TILT UP
5	LG	TILT DOWN

Connector No.	M133
Connector Name	FUSE BLOCK (J/B)
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	V	-
11C	V	-
13C	L	-
14C	Y	-
15C	R	-
16C	R	-
17C	L	-
18C	BG	- [Without DRPO]
18C	P	- [With DRPO]
19C	B	-
20C	W	-
21C	L	-
22C	L	-
23C	L	-
25C	LG	-

26C	SB	-
27C	P	-
28C	W	-
29C	W	-
2C	R	-
30C	R	-
31C	W	-
32C	R	-
33C	B	-
34C	W/B	-
35C	SB	-
36C	R	-
37C	W	-
38C	SB	-
39C	V	-
3C	P	-
40C	G	-
5C	P	-
6C	G	-
7C	G	-
9C	V	-

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

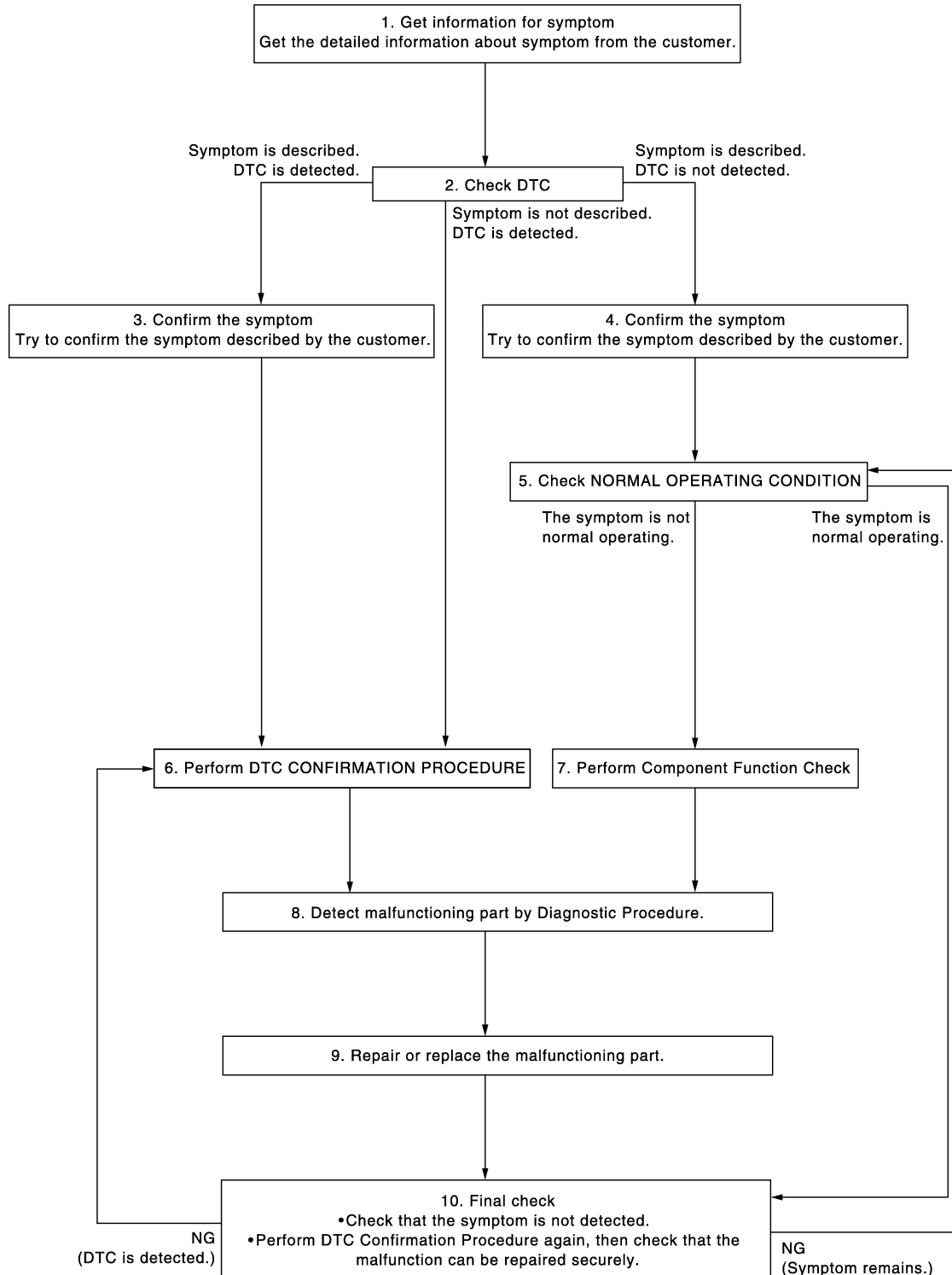
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011284152

OVERALL SEQUENCE



JMJIA1702GB

DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT. Refer to [ADP-40, "DTC Index"](#).

Is any symptom described and any DTC is displayed?

Symptom is described, DTC is displayed.>>GO TO 3.

Symptom is not described, DTC is displayed.>>GO TO 6.

Symptom is described, DTC is not displayed.>>GO TO 4.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5.CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to [ADP-144, "Description"](#).

Is the incident normal operation?

YES >> INSPECTION END.

NO >> GO TO 7.

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

7.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Isolate the malfunctioning point by performing the diagnosis procedure relevant to the symptom during the component diagnosis.

>> GO TO 9.

9.REPARE OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the malfunctioning part.

>> GO TO 10.

10.FINAL CHECK

Perform the DTC confirmation procedure (if DTC is detected) or component function check (if no DTC is detected) again, and then check that the malfunction can be repaired securely.

Are all malfunctions corrected?

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

YES >> INSPECTION END.
Symptom is detected.>> GO TO 5.
DTC is detected.>> GO TO 6.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000011284153

Each function is reset to the following condition when the battery terminal is disconnected.

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Entry/exit assist	ON	Perform initialization
		Set slide amount ^{*1}
Log-in	Erased	Perform initialization
		Perform storing

^{*1}: Default value is 40mm.

NOTE:

Notice that disconnecting the battery when detected DTC are present will erase the DTC memory.

Work Procedure

INFOID:0000000011284154

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [ADP-61, "Description"](#).

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to [ADP-62, "Description"](#).

>> GO TO 3.

3.LOG-IN STORAGE

Perform memory storage. Refer to [DMS-9, "LOG-IN FUNCTION : System Description"](#).

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to [ADP-63, "Description"](#).

>> END

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ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

Description

INFOID:0000000011284155

Each function is reset to the following condition when the driver seat control unit is replaced.

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Entry/exit assist	ON	Perform initialization
		Set slide amount ^{*1}
Log-in	Erased	Perform initialization
		Perform storing

^{*1}: Default value is 40mm.

NOTE:

Notice that disconnecting the battery when detected DTC are present will erase the DTC memory.

Work Procedure

INFOID:0000000011284156

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [ADP-61, "Description"](#).

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to [ADP-62, "Description"](#).

>> GO TO 3.

3.LOG-IN STORAGE

Perform memory storage. Refer to [DMS-9, "LOG-IN FUNCTION : System Description"](#).

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to [ADP-63, "Description"](#).

>> END

SYSTEM INITIALIZATION

< BASIC INSPECTION >

SYSTEM INITIALIZATION

Description

INFOID:0000000011284157

Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced.

The entry/exit assist function will not operate normally if no initialization is performed.

Work Procedure

INFOID:0000000011284158

INITIALIZATION PROCEDURE

1. CHOOSE METHOD

There are two initialization methods.

Which method do you use?

With door switch>>GO TO 2.

With vehicle speed>>GO TO 3.

2. WITH DOOR SWITCH

1. Turn ignition switch from ACC to OFF position.
2. Driver door switch is ON (open) → OFF (close) → ON (open).

>> END

3. WITH VEHICLE SPEED

Drive the vehicle at more than 25 km/h (16 MPH).

>> END

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MEMORY STORING

< BASIC INSPECTION >

MEMORY STORING

Description

INFOID:0000000011284159

Always perform the memory storage when the battery terminal is disconnected or the driver seat control unit is replaced. The memory function will not operate normally if no memory storage is performed.

Work Procedure

INFOID:0000000011284160

Memory Storage Procedure

Two positions for the driver seat, steering column and outside mirror can be stored for memory operation by following procedure.

NOTE:

Memory registration can be performed with no restrictions of the shift position, vehicle speed, and ignition switch position.

1.REGISTRATION METHOD

1. Adjust driver seat, steering column and outside mirror position manually.
2. Push set switch.

NOTE:

- Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
- Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second.

3. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.

NOTE:

- When registration is performed correctly, the memory indicator blinks for 5 seconds and a buzzer integrated in the combination meter sounds.
- If memory is stored in the same memory switch, the previous memory will be deleted.

4. Confirm the operation of each part with memory operation.

>> END

SYSTEM SETTING

< BASIC INSPECTION >

SYSTEM SETTING

Description

INFOID:0000000011284161

The settings of the automatic driving positioner system can be changed, using CONSULT, the display unit in the center of the instrument panel and the set switch. Always check the settings before and after disconnecting the battery terminal or replacing driver seat control unit.

Setting Change

x: Applicable

Item	Content	CON-SULT	Set switch	Factory setting
Amount of seat sliding for entry/exit assist	The amount of seat sliding for entry/exit assist can be selected from 3 items. [40mm/80mm/150mm]	x	—	40mm
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	x	x	ON
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	x		ON

Work Procedure

INFOID:0000000011284162

1. CHOOSE METHOD

There are two ways of setting method.

Which method do you choose?

With CONSULT>>GO TO 2.

With set switch>>GO TO 3.

2. WITH CONSULT

1. Select "Work support".
2. Select "EXIT SEAT SLIDE SETTING", or "EXIT TILT SETTING" then touch display to change between ON and OFF.
 - EXIT SEAT SLIDE SETTING: Entry/exit assist (seat)
 - EXIT TILT SETTING: Entry/exit assist (steering column)
3. Select "SEAT SLIDE VOLUME SET" and touch either of "40 mm", "80 mm", or "150 mm".
4. Then touch "OK".

>> GO TO 4.

3. WITH SET SWITCH

1. Turn ignition switch OFF.
2. Push setting button and hold for more than 10 seconds.

>> GO TO 4.

4.CONFIRM THE OPERATION

Check the entry/exit assist function setting is changed.

Is the setting changed?

YES >> END

NO >> GO TO 1.

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

DTC Description

INFOID:0000000011284163

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to [LAN-40, "CAN COMMUNICATION SYSTEM : CAN System Specification Chart"](#).

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
U1000	CAN COMM CIRCUIT (CAN communication circuit)	• Driver seat control unit cannot communicate to other control units. • When driver seat control unit cannot communicate CAN communication signal continuously for 2 seconds or more.

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON and wait at least 2 seconds or more.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to [ADP-64, "Diagnosis Procedure"](#).

NO-1 >> To check malfunction symptom before repair: Refer to [GI-42, "Intermittent Incident"](#).

NO-2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000011284164

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.

2. Check "Self Diagnostic Result".

Is DTC "U1000" displayed?

YES >> Refer to [LAN-24, "Trouble Diagnosis Flow Chart"](#).

NO >> GO TO 2

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END.

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Description

INFOID:0000000011284165

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
U1010	CONTROL UNIT (CAN) [Control unit (CAN)]	When detecting error during the initial diagnosis of CAN controller of driver seat control unit.

POSSIBLE CAUSE

Driver seat control unit

FAIL-SAFE

Only manual functions operate normally.

Diagnosis Procedure

INFOID:0000000011284166

1.REPLACE DRIVER SEAT CONTROL UNIT

When DTC [U1010] is detected, replace driver seat control unit.

>> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

ADP

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

DTC Description

INFOID:000000011284167

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2112	SEAT SLIDE (Seat slide)	The driver seat control unit detects the output of sliding motor output terminal for 0.1 second or more even if the sliding switch is not input.

POSSIBLE CAUSE

- Driver seat control unit
- Slide motor harness is shorted

FAIL-SAFE

Only manual functions, except seat sliding, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to [ADP-66, "Diagnosis Procedure"](#).

NO-1 >> To check malfunction symptom before repair: Refer to [GI-42, "Intermittent Incident"](#).

NO-2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:000000011284168

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-66, "DTC Description"](#).

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

2.CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.
2. Disconnect sliding motor and driver seat control unit connector.
3. Check voltage between sliding motor harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Sliding motor			
Connector	Terminals		
B604	38	Ground	0
	34		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.
2. Check voltage between driver seat control unit harness connector and ground.

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+) Driver seat control unit		(-)	Voltage (V)
Connector	Terminals		
B602	38	Ground	0 - 1
	34		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#)

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END.

ADP

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

DTC Description

INFOID:000000011284169

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2113	SEAT RECLINING (Seat reclining)	The driver seat control unit detects the output of reclining motor output terminal for 0.1 second or more even if the reclining switch is not input.

POSSIBLE CAUSE

- Driver seat control unit
- Reclining motor harness is shorted

FAIL-SAFE

Only manual functions, except seat reclining, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-68, "Diagnosis Procedure"](#).
NO-1 >> To check malfunction symptom before repair: Refer to [GI-42, "Intermittent Incident"](#).
NO-2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:000000011284170

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-68, "DTC Description"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

2.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.
2. Disconnect reclining motor and driver seat control unit connector.
3. Check voltage between reclining motor harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Reclining motor			
Connector	Terminals		
B605	39	Ground	0
	35		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness or connector.

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.
2. Check voltage between driver seat control unit harness connector and ground.

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage (V)
Driver seat control unit			
Connector	Terminals		
B602	39	Ground	0 - 1
	35		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END.

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B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

DTC Description

INFOID:000000011284171

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2116	STEERING TILT (Steering tilt)	The automatic drive positioner control unit detects the output of tilt motor output terminal for 0.1 second or more even if the tilt switch is not input.

POSSIBLE CAUSE

- Automatic drive positioner control unit
- Tilt motor harness is shorted

FAIL-SAFE

Only manual functions, except steering tilt, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-70, "Diagnosis Procedure"](#).
NO-1 >> To check malfunction symptom before repair: Refer to [GI-42, "Intermittent Incident"](#).
NO-2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:000000011284172

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-70, "DTC Description"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

2.CHECK TILT MOTOR CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and tilt & telescopic motor connector.
3. Check voltage between tilt motor harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Tilt & telescopic motor			
Connector	Terminals		
M28	7	Ground	0
	3		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness or connector.

3.CHECK AUTOMATIC DRIVER POSITIONER CONTROL UNIT OUTPUT SIGNAL

1. Connect automatic drive positioner control unit connector.
2. Check voltage between automatic drive positioner control unit harness connector and ground.

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage (V)
Automatic drive positioner control unit			
Connector	Terminals		
M44	28	Ground	0 - 1
	29		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END.

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ADP

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

DTC Description

INFOID:0000000011284173

Driver seat control unit performs UART communication with the automatic drive positioner control unit using 1 communication lines. Driver seat control unit receives the operation signals of tilt & telescopic switch, door mirror remote control switch, and the position signals of door mirror sensor from the automatic drive positioner control unit and transmits the operation request signal.

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2128	UART COMM (Universal asynchronous receiver transmitter communication)	The communication between driver seat control unit and auto drive positioner control unit is interrupted for a period of time.

POSSIBLE CAUSE

- UART communication line
(UART communication line is open or shorted)
- Driver seat control unit
- Automatic drive positioner control unit

FAIL-SAFE

Only manual functions, except door mirror, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-72, "Diagnosis Procedure"](#).
NO-1 >> To check malfunction symptom before repair: Refer to [GI-42, "Intermittent Incident"](#).
NO-2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000011284174

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-72, "DTC Description"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

2.CHECK UART COMMUNICATION LINE CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and automatic drive positioner control unit connector.
3. Check continuity between driver seat control unit harness connector and automatic drive positioner control unit harness connector.

Driver seat control unit		Automatic drive positioner control unit		Continuity
Connector	Terminal	Connector	Terminal	
B601	2	M43	8	Existed

4. Check continuity between driver seat control unit harness connector and ground.

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	2		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END.

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B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Description

INFOID:0000000011284175

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2130	EEPROM (EEPROM is malfunction)	Driver seat control unit detected CPU malfunction.

POSSIBLE CAUSE

Driver seat control unit

FAIL-SAFE

Only manual functions operate normally.

DTC CONFIRMATION PROCEDURE

1. SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-74, "Diagnosis Procedure"](#).
NO-1 >> To check malfunction symptom before repair: Refer to [GI-42, "Intermittent Incident"](#).
NO-2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000011284176

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-74, "DTC Description"](#).

Is the DTC displayed again?

- YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000011284177

1.CHECK FUSE

Check that the following fuse and fusible link are not fusing.

Signal name	Fuse No.
Battery power supply	M (40 A)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse are blown.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check voltage between driver seat control unit harness connector and ground.

(+)		(-)	Voltage (V)
Driver seat control unit			
Connector	Terminals		
B602	33	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between the driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	43		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:0000000011284178

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to [ADP-59, "Work Procedure"](#).

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000011284179

NOTE:

Do not disconnect the battery negative terminal and the driver seat control unit connector until DTC is confirmed with CONSULT.

1.CHECK FUSE

Check that the following fuse and fusible link are not fusing.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Signal name	Fuse No.
Battery power supply	M (40 A)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse are blown.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check voltage between automatic drive positioner control unit harness connector and ground.

(+) Automatic drive positioner control unit		(-)	Voltage (V)
Connector	Terminals		
M44	25	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between the automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	30		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:000000011284180

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to [ADP-59. "Work Procedure"](#).

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Component Function Check

INFOID:0000000011284181

1.CHECK FUNCTION

1. Select "SLIDE SW-FR", "SLIDE SW-RR" in "Data monitor" mode with CONSULT.
2. Check sliding switch signal under the following conditions.

Monitor item	Condition		Status
SLIDE SW-FR	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW-RR	Sliding switch (backward)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-77, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284182

1.CHECK SLIDING SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Turn ignition switch ON.
4. Check voltage between power seat switch harness connector and ground.

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	8	Ground	9 - 16
	24		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SLIDING SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	8	B603	8	Existed
	24		24	

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	8		Not existed
	24		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to [ADP-78, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#)

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284183

1.CHECK SLIDING SWITCH

1. Turn ignition switch OFF.
2. Disconnect power seat switch (sliding switch) connector.
3. Check continuity between power seat switch (sliding switch) terminals.

Power seat switch (Sliding switch)		Condition		Continuity
Terminal				
43	8	Sliding switch (backward)	Operate	Existed
			Release	Not existed
	24	Sliding switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Component Function Check

INFOID:0000000011284184

1.CHECK FUNCTION

1. Select "RECLN SW-FR", "RECLN SW-RR" in "Data monitor" mode with CONSULT.
2. Check reclining switch signal under the following conditions.

Monitor item	Condition		Status
RECLINE SW-FR	Reclining switch (forward)	Operate	ON
		Release	OFF
RECLINE SW-RR	Reclining switch (backward)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-79, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284185

1.CHECK RECLINING SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Turn ignition switch ON.
4. Check voltage between power seat switch harness connector and ground.

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	9	Ground	9 - 16
	25		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK RECLINING SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	9	B603	9	Existed
	25		25	

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	9		Not existed
	25		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SWITCH

Refer to [ADP-80, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284186

1.CHECK RECLINING SWITCH

1. Turn ignition switch OFF.
2. Disconnect power seat switch (reclining switch) connector.
3. Check continuity between power seat switch (reclining switch) terminals.

Power seat switch (Reclining switch)		Condition		Continuity
Terminal				
43	9	Reclining switch (backward)	Operate	Existed
			Release	Not existed
	25	Reclining switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Component Function Check

INFOID:0000000011284187

1.CHECK FUNCTION

1. Select "LIFT FR SW-UP", "LIFT FR SW-DN" in "Data monitor" mode with CONSULT.
2. Check lifting switch (front) signal under the following conditions.

Monitor item	Condition		Status
LIFT FR SW-UP	Lifting switch front (up)	Operate	ON
		Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-81, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284188

1.CHECK LIFTING SWITCH (FRONT) SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Turn ignition switch ON.
4. Check voltage between power seat switch harness connector and ground.

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	10	Ground	9 - 16
	26		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK LIFTING SWITCH (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	10	B603	10	Existed
	26		26	

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	10		Not existed
	26		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to [ADP-82, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284189

1.CHECK LIFTING SWITCH (FRONT)

1. Turn ignition switch OFF.
2. Disconnect power seat switch (lifting switch front) connector.
3. Check continuity between power seat switch (lifting switch front) terminals.

Power seat switch (lifting switch front)		Condition		Continuity
Terminal				
43	10	Lifting switch front (down)	Operate	Existed
			Release	Not existed
	26	Lifting switch front (up)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Component Function Check

INFOID:0000000011284190

1.CHECK FUNCTION

1. Select "LIFT RR SW-UP", "LIFT RR SW-DN" in "Data monitor" mode with CONSULT.
2. Check lifting switch (rear) signal under the following conditions.

Monitor item	Condition		Status
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-83, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284191

1.CHECK LIFTING SWITCH (REAR) SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Turn ignition switch ON.
4. Check voltage between power seat switch harness connector and ground.

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	11	Ground	9 - 16
	27		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK LIFTING SWITCH (REAR) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	11	B603	11	Existed
	27		27	

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	11		Not existed
	27		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to [ADP-84, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284192

1.CHECK LIFTING SWITCH (REAR)

1. Turn ignition switch OFF.
2. Disconnect power seat switch (lifting switch rear) connector.
3. Check continuity between power seat switch (lifting switch rear) terminals.

Power seat switch (lifting switch rear)		Condition		Continuity
Terminal				
43	11	Lifting switch rear (down)	Operate	Existed
			Release	Not existed
	27	Lifting switch rear (up)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to [SE-111, "Removal and Installation"](#).

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TILT SWITCH

Component Function Check

INFOID:0000000011284193

1.CHECK FUNCTION

1. Select "TILT SW-UP", "TILT SW-DOWN" in "Data monitor" mode with CONSULT.
2. Check tilt switch signal under the following conditions.

Monitor item	Condition		Status
TILT SW-UP	Tilt switch (up)	Operate	ON
		Release	OFF
TILT SW-DOWN	Tilt switch (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-85, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284194

1.CHECK TILT SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic switch connector.
3. Turn ignition switch ON.
4. Check voltage between tilt & telescopic switch harness connector and ground.

(+)		(-)	Voltage (V)
Tilt & telescopic switch			
Connector	Terminals		
M121	4	Ground	4 - 6
	5		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TILT SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic switch harness connector.

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	
M43	1	M121	4	Existed
	13		5	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	1		Not existed
	13		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK TILT SWITCH

Refer to [ADP-86, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to [ADP-148, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284195

1.CHECK TILT SWITCH

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic switch connector.
3. Check continuity between tilt & telescopic switch terminals.

Tilt switch		Condition		Continuity
Terminal				
1	4	Tilt switch (upward)	Operate	Existed
			Release	Not existed
	5	Tilt switch (downward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to [ADP-148, "Removal and Installation"](#).

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Component Function Check

INFOID:0000000011284196

1.CHECK FUNCTION

1. Select "TELESCO SW-FR", "TELESCO SW-RR" in "Data monitor" mode with CONSULT.
2. Check telescopic switch signal under the following conditions.

Monitor item	Condition		Status
TELESCO SW-FR	Telescopic switch (forward)	Operate	ON
		Release	OFF
TELESCO SW-RR	Telescopic switch (backward)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-87, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284197

1.CHECK TELESCOPIC SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic switch connector.
3. Turn ignition switch ON.
4. Check voltage between tilt & telescopic switch harness connector and ground.

(+)		(-)	Voltage (V)
Tilt & telescopic switch			
Connector	Terminals		
M121	2	Ground	4 - 6
	3		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TELESCOPIC SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic switch harness connector.

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	
M43	7	M121	2	Existed
	19		3	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	7		Not existed
	19		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC SWITCH

Refer to [ADP-88, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to [ADP-148, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284198

1.CHECK TELESCOPIC SWITCH

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic switch connector.
3. Check continuity between tilt & telescopic switch terminals.

Telescopic switch		Condition		Continuity
Terminal				
1	2	Telescopic switch (forward)	Operate	Existed
			Release	Not existed
	3	Telescopic switch (backward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to [ADP-148, "Removal and Installation"](#).

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Component Function Check

INFOID:0000000011284199

1.CHECK FUNCTION

1. Select "MEMORY SW 1", "MEMORY SW 2", "SET SW" in "Data monitor" mode with CONSULT.
2. Check seat memory switch signal under the following conditions.

Monitor item	Condition		Status
MEMORY SW 1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW 2	Memory switch 2	Push	ON
		Release	OFF
SET SW	Set switch	Push	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-89, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284200

1.CHECK SEAT MEMORY SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Turn ignition switch ON.
4. Check voltage between driver seat control unit harness connector and ground.

(+)		(-)	Voltage (V)
Seat memory switch			
Connector	Terminals		
D9	1	Ground	4 - 6
	2		
	3		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK MEMORY SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and seat memory switch harness connector.

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	22	D9	1	Existed
	6		2	
	28		3	

4. Check continuity between driver seat control unit harness connector and ground.

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	22		Not existed
	6		
	28		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D9	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK SEAT MEMORY SWITCH

Refer to [ADP-90, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to [ADP-147, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000011284201

1.CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check continuity between seat memory switch terminals.

Seat memory switch		Condition		Continuity
Terminal				
4	1	Memory switch 1	Push	Existed
			Release	Not existed
	2	Memory switch 2	Push	Existed
			Release	Not existed
	3	Set switch	Push	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to [ADP-147, "Removal and Installation"](#).

POWER WINDOW MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MAIN SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000011284202

1.CHECK CHANGEOVER SWITCH FUNCTION

Check the operation on "MIR CHNG SW-R" or "MIR CHNG SW-L" in "DATA MONITOR" mode with CONSULT.

Monitor item	Condition	Status
MIR CHNG SW-R/L	When operating the changeover toward the right or left side.	ON
	Other than the above.	OFF

Is the inspection result normal?

YES >> Changeover switch function is OK.

NO >> Refer to [ADP-91, "CHANGEOVER SWITCH : Diagnosis Procedure"](#).

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000011284203

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power window main switch (door mirror remote control switch) connector.
3. Turn ignition switch ON.
4. Check voltage between power window main switch (door mirror remote control switch) harness connector and ground.

(+) Power window main switch (door mirror remote control switch)		(-) Ground	Voltage (V)
Connector	Terminal		
D55	23	Ground	4 - 6
	28		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK CHANGEOVER SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and power window main switch (door mirror remote control switch) harness connector.

Automatic drive positioner control unit		Power window main switch (door mirror remote control switch)		Continuity
Connector	Terminal	Connector	Terminal	
M43	2	D55	28	Existed
	14		23	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	2		Not existed
	14		

Is the inspection result normal?

POWER WINDOW MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between power window main switch (door mirror remote control switch) harness connector and ground.

Power window main switch (door mirror remote control switch)		Ground	Continuity
Connector	Terminal		
D8	7		Existed

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK CHANGEOVER SWITCH

Check changeover switch on power window main switch (door mirror remote control switch).
Refer to [ADP-92, "CHANGEOVER SWITCH : Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace power window main switch (door mirror remote control switch). Refer to [PWC-78, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000011284204

1.CHECK CHANGEOVER SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch (door mirror remote control switch) connector.
3. Check continuity between power window main switch (door mirror remote control switch) terminals.

Power window main switch (door mirror remote control switch)		Condition		Continuity
Terminal				
23	7	Changeover switch	LEFT	Existed
			Other than the above	Not existed
28			RIGHT	Existed
			Other than the above	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Replace power window main switch (door mirror remote control switch). Refer to [PWC-78, "Removal and Installation"](#).

MIRROR SWITCH

MIRROR SWITCH : Component Function Check

INFOID:0000000011284205

1.CHECK MIRROR SWITCH FUNCTION

Check the operation on "MIR CON SW-UP/DN" and "MIR CON SW-RH/LH" in "DATA MONITOR" mode with CONSULT.

POWER WINDOW MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition	Status
MIR CON SW-UP/DN	When operating the mirror switch toward the up or down side.	ON
	Other than the above.	OFF
MIR CON SW-RH/LH	When operating the mirror switch toward the right or left side.	ON
	Other than the above.	OFF

Is the inspection result normal?

YES >> Mirror switch function is OK.

NO >> Refer to [ADP-93. "MIRROR SWITCH : Diagnosis Procedure"](#).

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000011284206

1.CHECK MIRROR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power window main switch (door mirror remote control switch) connector.
3. Turn ignition switch ON.
4. Check voltage between power window main switch (door mirror remote control switch) harness connector and ground.

(+)		(-)	Voltage (V)
Power window main switch (door mirror remote control switch)			
Connector	Terminal		
D55	24	Ground	4 - 6
	25		
	26		
	27		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK MIRROR SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and power window main switch (door mirror remote control switch) harness connector.

Automatic drive positioner control unit		Power window main switch (door mirror remote control switch)		Continuity
Connector	Terminal	Connector	Terminal	
M43	3	D55	26	Existed
	4		24	
	15		25	
	16		27	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	3	Ground	Not existed
	4		
	15		
	16		

POWER WINDOW MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between power window main switch (door mirror remote control switch) harness connector and ground.

Power window main switch (door mirror remote control switch)		Ground	Continuity
Connector	Terminal		
D8	7		Existed

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK MIRROR SWITCH

Check mirror switch on power window main switch (door mirror remote control switch).
Refer to [ADP-94, "MIRROR SWITCH : Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace power window main switch (door mirror remote control switch). Refer to [PWC-78, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:0000000011284207

1.CHECK MIRROR SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch (door mirror remote control switch) connector.
3. Check continuity between power window main switch (door mirror remote control switch) terminals.

Power window main switch (door mirror remote control switch)		Condition		Continuity
Terminal				
24	7	Mirror switch	LEFT	Existed
			Other than the above	Not existed
25			DOWN	Existed
			Other than the above	Not existed
26			UP	Existed
			Other than the above	Not existed
27			RIGHT	Existed
			Other than the above	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Replace power window main switch (door mirror remote control switch). Refer to [PWC-78, "Removal and Installation"](#).

POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000011284208

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Check continuity between power seat switch harness connector and ground.

Power seat switch		Ground	Continuity
Connector	Terminal		
B603	43		Existed

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

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TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000011284209

1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic switch connector.
3. Check continuity between tilt & telescopic switch harness connector and ground.

Tilt & telescopic switch		Ground	Continuity
Connector	Terminal		
M121	1		Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Component Function Check

INFOID:0000000011284210

1.CHECK FUNCTION

1. Select "SLIDE PULSE" in "Data monitor" mode with CONSULT.
2. Check sliding sensor signal under the following conditions.

Monitor item	Condition		Value
SLIDE PULSE	Seat sliding	Operate (forward)	Change (increase)* ¹
		Operate (backward)	Change (decrease)* ¹
		Release	No change* ¹

*¹: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

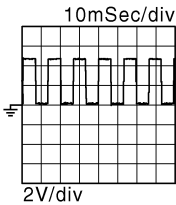
NO >> Perform diagnosis procedure. Refer to [ADP-97. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284211

1.CHECK SLIDING SENSOR SIGNAL

1. Turn ignition switch ON.
2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	18	Ground	Seat sliding	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and sliding motor connector.
3. Check continuity between driver seat control unit harness connector and sliding sensor harness connector.

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	18	B604	18	Existed

4. Check continuity between driver seat control unit harness connector and ground.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	18		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SENSOR POWER SUPPLY

1. Connect driver seat control unit connector.
2. Turn ignition switch ON.
3. Check voltage between sliding motor harness connector and ground.

(+)		(-)	Voltage (V)
Sliding motor			
Connector	Terminals		
B604	12	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and sliding motor harness connector.

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B604	12	Existed

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK SLIDING SENSOR GROUND

1. Turn ignition switch OFF.
2. Check continuity between sliding sensor harness connector and ground.

Sliding motor		Ground	Continuity
Connector	Terminal		
B604	43		Existed

Is the inspection result normal?

YES >> Replace sliding motor.

NO >> Repair or replace harness or connector.

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Component Function Check

INFOID:0000000011284212

1.CHECK FUNCTION

1. Select "RECLN PULSE" in "Data monitor" mode with CONSULT.
2. Check reclining sensor signal under the following conditions.

Monitor item	Condition		Value
RECLN PULSE	Seat reclining	Operate (forward)	Change (increase)* ¹
		Operate (backward)	Change (decrease)* ¹
		Release	No change* ¹

*¹: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

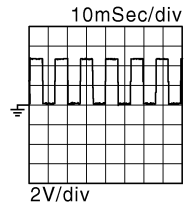
NO >> Perform diagnosis procedure. Refer to [ADP-99, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284213

1.CHECK RECLINING SENSOR SIGNAL

1. Turn ignition switch ON.
2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	4	Ground	Seat reclining	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and reclining motor connector.
3. Check continuity between driver seat control unit harness connector and reclining motor harness connector.

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	4	B605	4	Existed

4. Check continuity between driver seat control unit harness connector and ground.

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	4		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SENSOR POWER SUPPLY

1. Connect driver seat control unit connector.
2. Turn ignition switch ON.
3. Check voltage between reclining motor harness connector and ground.

(+)		(-)	Voltage (V)
Reclining motor			
Connector	Terminals		
B605	12	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and reclining motor harness connector.

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B605	12	Existed

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK RECLINING SENSOR GROUND

1. Turn ignition switch OFF.
2. Check continuity between reclining motor harness connector and ground.

Reclining motor		Ground	Continuity
Connector	Terminal		
B605	43		Existed

Is the inspection result normal?

YES >> Replace reclining motor.

NO >> Repair or replace harness or connector.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:0000000011284214

1.CHECK FUNCTION

1. Select "LIFT FR PULSE" in "Data monitor" mode with CONSULT.
2. Check the lifting sensor (front) signal under the following conditions.

Monitor item	Condition		Value
LIFT FR PULSE	Seat lifting (front)	Operate (up)	Change (increase)* ¹
		Operate (down)	Change (decrease)* ¹
		Release	No change* ¹

*¹: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

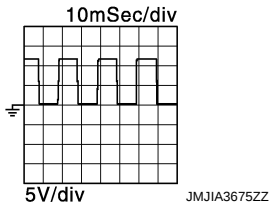
NO >> Perform diagnosis procedure. Refer to [ADP-101. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284215

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

1. Turn ignition switch ON.
2. Read the voltage signal lifting sensor harness connector and ground with an oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	19	Ground	Seat Lifting (front)	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor (front) connector.
3. Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B601	19	B607	19	Existed

4. Check continuity between driver seat control unit harness connector and ground.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	19		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect lifting sensor control unit connector and lifting motor (front) connector.
3. Check continuity between lifting sensor control unit harness connector and lifting motor (front) harness connector.

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B607	12	Existed

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK LIFTING SENSOR (FRONT) GROUND

1. Turn ignition switch OFF.
2. Check continuity between lifting motor (front) harness connector and ground.

Lifting motor (front)		Ground	Continuity
Connector	Terminal		
B607	43		Existed

Is the inspection result normal?

YES >> Replace lifting motor (front).

NO >> Repair or replace harness or connector.

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Component Function Check

INFOID:0000000011284216

1.CHECK FUNCTION

1. Select "LIFT RR PULSE" in "Data monitor" mode with CONSULT.
2. Check lifting sensor (rear) signal under the following conditions.

Monitor item	Condition		Value
LIFT RR PULSE	Seat lifting (rear)	Operate (up)	Change (increase)* ¹
		Operate (down)	Change (decrease)* ¹
		Release	No change* ¹

*¹: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

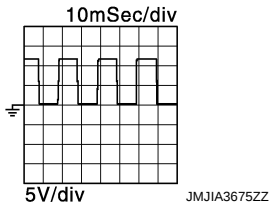
NO >> Perform diagnosis procedure. Refer to [ADP-103, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284217

1.CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.
2. Read the voltage signal lifting sensor harness connector and ground with an oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	20	Ground	Seat Lifting (rear)	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK LIFTING SENSOR (REAR) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor (rear) connector.
3. Check continuity between driver seat control unit harness connector and lifting motor (rear) harness connector.

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B601	20	B606	20	Existed

4. Check continuity between driver seat control unit harness connector and ground.

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	20		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect lifting sensor control unit connector and lifting motor (rear) connector.
3. Check continuity between lifting sensor control unit harness connector and lifting motor (rear) harness connector.

Drive seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B606	12	Existed

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK LIFTING SENSOR (REAR) GROUND

1. Turn ignition switch OFF.
2. Check continuity between lifting motor (rear) harness connector and ground.

Lifting motor (rear)		Ground	Continuity
Connector	Terminal		
B606	43		Existed

Is the inspection result normal?

YES >> Replace lifting motor (rear).

NO >> Repair or replace harness or connector.

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TILT SENSOR

Component Function Check

INFOID:0000000011284218

1.CHECK FUNCTION

1. Select "TILT PULSE" in "Data monitor" mode with CONSULT.
2. Check tilt sensor signal under the following conditions.

Monitor item	Condition		Value
TILT PULSE	Steering tilt	Operate (up)	Change (increase)* ¹
		Operate (down)	Change (decrease)* ¹
		Release	No change* ¹

*¹: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

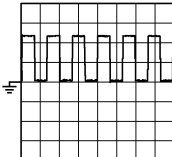
NO >> Perform diagnosis procedure. Refer to [ADP-105. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284219

1.CHECK TILT SENSOR SIGNAL

1. Turn ignition switch ON.
2. Check voltage signal between driver seat control unit connector and ground with oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminal				
B601	21	Ground	Steering tilt	Operate	10mSec/div  2V/div JMJA0119ZZ
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK TILT SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and tilt & telescopic motor connector.
3. Check continuity between driver seat control unit harness connector and tilt & telescopic motor harness connector.

Driver seat control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	21	M28	1	Existed

4. Check continuity between driver seat control unit harness connector and ground.

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	21		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK TILT SENSOR POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Voltage (V)
Tilt & telescopic motor			
Connector	Terminals		
M28	2	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TILT SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	27	M28	2	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-146. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK TILT SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	M28	8	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace tilt & telescopic motor.
- NO >> Repair or replace harness or connector.

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ADP

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Component Function Check

INFOID:000000011284220

1.CHECK FUNCTION

1. Select "TELESCO PULSE" in "Data monitor" mode with CONSULT.
2. Check telescopic sensor signal under the following conditions.

Monitor item	Condition		Value
TELESCO PULSE	Steering telescopic	Operate (forward)	Change (increase) ^{*1}
		Operate (backward)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

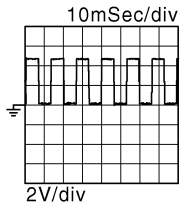
NO >> Perform diagnosis procedure. Refer to [ADP-108. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000011284221

1.CHECK TELESCOPIC SENSOR SIGNAL

1. Turn ignition switch ON.
2. Check voltage signal between driver seat control unit connector and ground with oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	5	Ground	Steering telescopic	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and tilt & telescopic motor connector.
3. Check continuity between driver seat control unit harness connector and tilt & telescopic motor harness connector.

Driver seat control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	5	M28	5	Existed

4. Check continuity between driver seat control unit harness connector and ground.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	5		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC SENSOR POWER SUPPLY

1. Connect driver seat control unit connector.
2. Turn ignition switch ON.
3. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Voltage (V)
Tilt & telescopic motor			
Connector	Terminals		
M28	6	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	27	M28	6	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK TELESCOPIC SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	M28	9	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace tilt & telescopic motor.
- NO >> Repair or replace harness or connector.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SENSOR

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000011284222

1.CHECK FUNCTION

1. Select "MIR/SEN LH U-D", "MIR/SEN LH R-L" in "Data monitor" with CONSULT.
2. Check mirror sensor (driver side) signal under the following condition.

Monitor item	Condition	Value
MIR/SEN LH U-D	Door mirror (driver side)	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)
MIR/SEN LH R-L		Change between 0.6 [V] (close to left edge) 3.4 [V] (close to right edge)

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-111, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000011284223

1.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (driver side) harness connector and ground.

(+)		(-)	Voltage (V)
Door mirror (driver side)			
Connector	Terminals		
D56	23	Ground	4 - 6

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	21	D56	23	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	21		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	D56	24	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

1. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	6	D56	21	Existed
	18		22	

2. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	6		Not existed
	18		

Is the inspection result normal?

YES >> Replace door mirror sensor (built in driver side mirror).

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000011284224

1.CHECK FUNCTION

1. Select "MIR/SEN RH U-D", "MIR/SEN RH R-L" in "Data monitor" with CONSULT.
2. Check the mirror sensor (passenger side) signal under the following conditions.

Monitor item	Condition	Value
MIR/SEN RH U-D	Door mirror (passenger side)	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)
MIR/SEN RH R-L		Change between 3.4 [V] (close to left edge) 0.6 [V] (close to right edge)

Is the indication normal?

YES >> INSPECTION END

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

NO >> Perform diagnosis procedure. Refer to [ADP-113. "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000011284225

1.CHECK DOOR MIRROR SENSOR (PASSENGER SIDE) POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect door mirror (passenger side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (passenger side) harness connector and ground.

(+)		(-)	Voltage (V)
Door mirror (passenger side)			
Connector	Terminals		
D57	23	Ground	4 - 6

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and door mirror (passenger side) harness connector.

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	21	D57	23	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	21		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-146. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and door mirror (passenger side) connector.

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	D57	24	Existed

4. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

1. Check continuity between automatic drive positioner control unit harness connector and door mirror (passenger side) harness connector.

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	5	D57	21	Existed
	17		22	

2. Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	5		Not existed
	17		

Is the inspection result normal?

- YES >> Replace door mirror sensor (built in passenger side door mirror).
NO >> Repair or replace harness or connector.

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

Component Function Check

INFOID:0000000011284226

1.CHECK FUNCTION

1. Select "SEAT SLIDE" in "Active test" mode with CONSULT.
2. Check the sliding motor operation.

Test item		Description	
SEAT SLIDE	OFF	Seat sliding	Stop
	FR		Forward
	RR		Backward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-115. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284227

1.CHECK SLIDING MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect sliding motor connector.
3. Turn ignition switch ON.
4. Perform "Active test" ("SEAT SLIDE") with CONSULT.
5. Check voltage between sliding motor harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Sliding motor					
Connector	Terminal				
B604	38	Ground	SEAT SLIDE	OFF	0 - 1
				FR (forward)	9 - 16
				RR (backward)	0 - 1
	34			OFF	0 - 1
				FR (forward)	0 - 1
				RR (backward)	9 - 16

Is the inspection result normal?

YES >> Replace sliding motor (built in seat slide cushion frame).

NO >> GO TO 2.

2.CHECK SLIDING MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and sliding motor harness connector.

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B602	34	B604	34	Existed
	38		38	

4. Check continuity between driver seat control unit harness connector and ground.

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	34		Not existed
	38		

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING MOTOR

Component Function Check

INFOID:0000000011284228

1.CHECK FUNCTION

1. Select "SEAT RECLINING" in "Active test" mode with CONSULT.
2. Check the reclining motor operation.

Test item		Description	
SEAT RECLINING	OFF	Seat reclining	Stop
	FR		Forward
	RR		Backward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-117, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284229

1.CHECK RECLINING MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect reclining motor connector.
3. Turn ignition switch ON.
4. Perform "Active test" ("SEAT RECLINING") with CONSULT.
5. Check voltage between reclining motor harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Reclining motor					
Connector	Terminal				
B605	35	Ground	SEAT RECLINING	OFF	0 - 1
				FR (forward)	9 - 16
				RR (backward)	0 - 1
	39			OFF	0 - 1
				FR (forward)	0 - 1
				RR (backward)	9 - 16

Is the inspection result normal?

YES >> Replace reclining motor (built in seat back frame).

NO >> GO TO 2.

2.CHECK RECLINING MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and reclining motor harness connector.

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B602	35	B605	35	Existed
	39		39	

4. Check continuity between driver seat control unit harness connector and ground.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	35		Not existed
	39		

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Component Function Check

INFOID:0000000011284230

1.CHECK FUNCTION

1. Select "SEAT LIFTER FR" in "Active test" mode with CONSULT.
2. Check the lifting motor (front) operation.

Test item		Description	
SEAT LIFTER FR	OFF	Seat lifting (front)	Stop
	UP		Upward
	DWN		Downward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-119, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284231

1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect lifting motor (front) connector.
3. Turn ignition switch ON.
4. Perform "Active test" ("SEAT LIFTER FR") with CONSULT.
5. Check voltage between lifting motor (front) harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Lifting motor (front)					
Connector	Terminal				
B607	40	Ground	SEAT LIFTER FR	OFF	0 - 1
				UP	9 - 16
				DWN (DOWN)	0 - 1
	36			OFF	0 - 1
				UP	0 - 1
				DWN (DOWN)	9 - 16

Is the inspection result normal?

YES >> Replace lifting motor (front) (built in seat cushion frame).

NO >> GO TO 2.

2.CHECK LIFTING MOTOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B602	40	B607	40	Existed
	36		36	

4. Check continuity between driver seat control unit harness connector and ground.

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	40		Not existed
	36		

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (REAR)

Component Function Check

INFOID:0000000011284232

1.CHECK FUNCTION

1. Select "SEAT LIFTER RR" in "Active test" mode with CONSULT.
2. Check the lifting motor (rear) operation.

Test item		Description	
SEAT LIFTER RR	OFF	Seat lifting (rear)	Stop
	UP		Upward
	DWN		Downward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-121. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284233

1.CHECK LIFTING MOTOR (REAR) POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect lifting motor (rear) connector.
3. Turn ignition switch ON.
4. Perform "Active test" ("SEAT LIFTER RR") with CONSULT.
5. Check voltage between lifting motor (rear) harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Lifting motor (rear)					
Connector	Terminal				
B606	42	Ground	SEAT LIFTER RR	OFF	0 - 1
				UP	0 - 1
				DWN (DOWN)	9 - 16
	41			OFF	0 - 1
				UP	9 - 16
				DWN (DOWN)	0 - 1

Is the inspection result normal?

YES >> Replace lifting motor (rear) (built in seat cushion frame).

NO >> GO TO 2.

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check continuity between driver seat control unit harness connector and lifting motor (rear) harness connector.

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B602	42	B606	42	Existed
	41		41	

4. Check continuity between driver seat control unit harness connector and ground.

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	42		Not existed
	41		

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-145. "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TILT MOTOR

Component Function Check

INFOID:0000000011284234

1.CHECK FUNCTION

1. Select "TILT MOTOR" in "Active test" mode with CONSULT.
2. Check the tilt motor operation.

Test item		Description	
TILT MOTOR	OFF	Steering tilt	Stop
	UP		Upward
	DWN		Downward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-123. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284235

1.CHECK TILT MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic motor connector.
3. Turn ignition switch ON.
4. Perform "Active test" ("TILT MOTOR") with CONSULT.
5. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Tilt & telescopic motor					
Connector	Terminals				
M28	7	Ground	TILT MOTOR	OFF	0 - 1
				UP	0 - 1
				DWN (down)	9 - 16
	3			OFF	0 - 1
				UP	9 - 16
				DWN (down)	0 - 1

Is the inspection result normal?

YES >> Replace tilt & telescopic motor.

NO >> GO TO 2.

2.CHECK TILT MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	28	M28	7	Existed
	29		3	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	28		Not existed
	29		

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC MOTOR

Component Function Check

INFOID:0000000011284236

1.CHECK FUNCTION

1. Select "TELESCO MOTOR" in "Active test" mode with CONSULT.
2. Check the telescopic motor operation.

Test item		Description	
TELESCO MOTOR	OFF	Steering telescopic	Stop
	FR		Forward
	RR		Backward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-125. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284237

1.CHECK TELESCOPIC MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic motor connector.
3. Turn ignition switch ON.
4. Perform "Active test" ("TELESCO MOTOR") with CONSULT.
5. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Tilt & telescopic motor					
Connector	Terminals				
M28	10	Ground	TELESCO MO- TOR	OFF	0 - 1
				FR (forward)	0 - 1
				RR (backward)	9 - 16
	4			OFF	0 - 1
				FR (forward)	9 - 16
				RR (backward)	0 - 1

Is the inspection result normal?

YES >> Replace tilt & telescopic motor (built in steering column assembly).

NO >> GO TO 2.

2.CHECK TELESCOPIC MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	26	M28	10	Existed
	29		4	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	26		Not existed
	29		

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR MOTOR

Component Function Check

INFOID:0000000011284238

1.CHECK DOOR MIRROR MOTOR FUNCTION

1. Select "MIRROR MOTOR RH" and "MIRROR MOTOR LH" in "Active test" mode with CONSULT.
2. Check the door mirror motor operation.

Test item		Description	
MIRROR MOTOR LH	UP	Door mirror (driver side)	Upward
	DN		Downward
	LH		Leftward
	RH		Rightward
	OFF		Stop
MIRROR MOTOR RH	UP	Door mirror (passenger side)	Upward
	DN		Downward
	LH		Leftward
	RH		Rightward
	OFF		Stop

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Refer to [ADP-127, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284239

1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect door mirror connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Door mirror					
Connector	Terminals				
D56 (Driver side) D57 (Passenger side)	10	Ground	MIRROR MOTOR RH/LH	DOWN / RIGHT	9 - 16
				Other than the above	0 - 1
	11			LEFT	9 - 16
				Other than the above	0 - 1
	12			UP	9 - 16
				Other than the above	0 - 1

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR MIRROR MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector.
3. Check continuity between automatic drive positioner control unit harness connector and door mirror harness connector.

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[Driver side]

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	12	D56	10	Existed
	23		12	
	24		11	

[Passenger side]

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	22	D57	10	Existed
	10		12	
	11		11	

4. Check continuity between automatic drive positioner control unit harness connector and ground.

[Driver side]

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	12		Not existed
	23		
	24		

[Passenger side]

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	22		Not existed
	10		
	11		

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-146, "Removal and Installation"](#).
 NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to [ADP-128, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).
 NO >> Replace door mirror. Refer to [MIR-45, "DOOR MIRROR : Removal and Installation"](#).

Component Inspection

INFOID:0000000011284240

1.CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage.

Refer to [MIR-46, "DOOR MIRROR : Disassembly and Assembly"](#).

Is the inspection result normal?

- YES >> GO TO 2.
 NO >> Replace door mirror. Refer to [MIR-45, "DOOR MIRROR : Removal and Installation"](#).

2.CHECK DOOR MIRROR MOTOR-II

1. Turn ignition switch OFF.
2. Disconnect door mirror connector.
3. Apply 12V to each power supply terminal of door mirror motor.

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Door mirror			Operational direction
Connector	Terminal		
	(+)	(-)	
D56 (Driver side) D57 (Passenger side)	10	11	RIGHT
	11	10	LEFT
	12	10	UP
	10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror. Refer to [MIR-45, "DOOR MIRROR : Removal and Installation"](#).

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SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Component Function Check

INFOID:0000000011284241

1.CHECK FUNCTION

1. Select "MEMORY SW INDCTR" in "Active test" mode with CONSULT.
2. Check the memory indicator operation.

Test item		Description	
MEMORY SW INDCTR	OFF	Memory switch indicator	OFF
	ON-1		Indicator 1: ON
	ON-2		Indicator 2: ON

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-130, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011284242

1.CHECK SEAT MEMORY INDICATOR OPERATION

Check seat memory indicator operation.

Which is the malfunctioning indicator?

All indicators are NG>>GO TO 2.

An indicator is NG>>GO TO 4.

2.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the blown fuse after repairing the affected circuit if a fuse is blown.

Signal name	Fuse No.
Battery power supply	20 (10 A)

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

3.CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+)		(-)	Voltage (V)
Seat memory switch			
Connector	Terminals		
D9	5	Ground	9 - 16

Is the inspection result normal?

YES >> Replace seat memory switch. Refer to [ADP-147, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

4.CHECK MEMORY INDICATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and seat memory switch connector.
3. Check continuity between driver seat control unit harness connector and seat memory switch harness connector.

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	7	D9	7	Existed
	23		6	

4. Check continuity between driver seat control unit harness connector and ground.

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	7		Not existed
	23		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-145, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

ADP

MANUAL FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

MANUAL FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000011284243

1.CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check driver seat control unit power supply and ground circuit.

Refer to [ADP-75. "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check automatic drive positioner control unit power supply and ground circuit.

Refer to [ADP-75. "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

POWER SEAT

POWER SEAT : Diagnosis Procedure

INFOID:0000000011284244

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check power seat switch ground circuit.

Refer to [ADP-95. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

TILT & TELESCOPIC

TILT & TELESCOPIC : Diagnosis Procedure

INFOID:0000000011284245

1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Check tilt & telescopic switch ground circuit.

Refer to [ADP-96. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

2.CONFIRM THE OPERATION

Confirm the operation again.

MANUAL FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000011284246

1.CHECK SLIDING MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK SLIDING SWITCH

Check sliding switch.

Refer to [ADP-77, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK SLIDING MOTOR

Check sliding motor.

Refer to [ADP-115, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000011284247

1.CHECK RECLINING MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK RECLINING SWITCH

Check reclining switch.

Refer to [ADP-79, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor.

Refer to [ADP-117, "Component Function Check"](#).

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MANUAL FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000011284248

1.CHECK LIFTING (FRONT) MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK LIFTING SWITCH (FRONT)

Check lifting switch (front).

Refer to [ADP-81. "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (FRONT)

Check lifting motor (front).

Refer to [ADP-119. "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000011284249

1.CHECK LIFTING (REAR) MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK LIFTING SWITCH (REAR)

Check lifting switch (rear).

Refer to [ADP-83. "Component Function Check"](#).

Is the inspection result normal?

MANUAL FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).

Refer to [ADP-121. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).
NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000011284250

1.CHECK STEERING TILT MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK TILT SWITCH

Check tilt switch.

Refer to [ADP-85. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK TILT MOTOR

Check tilt motor.

Refer to [ADP-123. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).
NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:0000000011284251

1.CHECK STEERING TELESCOPIC MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

MANUAL FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

NO >> Repair or replace the malfunction parts.

2.CHECK TELESCOPIC SWITCH

Check telescopic switch.

Refer to [ADP-85. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK TELESCOPIC MOTOR

Check telescopic motor.

Refer to [ADP-123. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:000000011284252

1.CHECK DOOR MIRROR MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH)

Check mirror switch and change over switch.

Refer to [ADP-92. "MIRROR SWITCH : Component Function Check"](#) (mirror switch), [ADP-91. "CHANGEOVER SWITCH : Component Function Check"](#) (change over switch).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to [ADP-127. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MEMORY FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000011284253

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE

1. Perform initialization procedure.

Refer to [ADP-61, "Work Procedure"](#).

2. Perform memory storing procedure.

Refer to [ADP-62, "Work Procedure"](#).

3. Check memory function.

Refer to [ADP-20, "MEMORY FUNCTION : System Description"](#).

Is the inspection result normal?

YES >> Memory function is normal.

NO >> GO TO 3.

3.CHECK SEAT MEMORY SWITCH

Check seat memory switch.

Refer to [ADP-89, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000011284254

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [ADP-133, "SEAT SLIDING : Diagnosis Procedure"](#).

2.CHECK SLIDING SENSOR

Check sliding sensor.

Refer to [ADP-97, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000011284255

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [ADP-133, "SEAT RECLINING : Diagnosis Procedure"](#).

2.CHECK RECLINING SENSOR

Check reclining sensor.

Refer to [ADP-97, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000011284256

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [ADP-134, "SEAT LIFTING \(FRONT\) : Diagnosis Procedure"](#).

2.CHECK LIFTING SENSOR (FRONT)

Check lifting sensor (front).

Refer to [ADP-101, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000011284257

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [ADP-134, "SEAT LIFTING \(REAR\) : Diagnosis Procedure"](#).

MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).

Refer to [ADP-103, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000011284258

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [ADP-135, "STEERING TILT : Diagnosis Procedure"](#).

2.CHECK TILT SENSOR

Check steering tilt sensor.

Refer to [ADP-105, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:0000000011284259

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [ADP-135, "STEERING TELESCOPIC : Diagnosis Procedure"](#).

2.CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

Refer to [ADP-108, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).
NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:0000000011284260

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to [ADP-136, "DOOR MIRROR : Diagnosis Procedure"](#).

2.CHECK MIRROR SENSOR

Check mirror sensor.

Refer to [ADP-111, "DRIVER SIDE : Component Function Check"](#). (Driver side)

Refer to [ADP-112, "PASSENGER SIDE : Component Function Check"](#). (Passenger side)

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).
NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011284261

1.CHECK SYSTEM SETTING

1. Check system setting.
Refer to [ADP-63, "Work Procedure"](#).

2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.

NO >> GO TO 2.

2.PERFORM SYSTEM INITIALIZATION

1. Perform system initialization.
Refer to [ADP-61, "Work Procedure"](#).

2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.

NO >> GO TO 3.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check front door switch (driver side).

Refer to [DLK-111, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000011284262

1.CHECK LOG-IN FUNCTION

Check Log-in function is performed.

Refer to [DMS-9, "LOG-IN FUNCTION : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [DMS-19, "LOG-IN FUNCTION : Work Flow"](#).

2.CHECK REMOTE KEYLESS ENTRY FUNCTUION

Check door lock/unlock using Intelligent Key button operation.

Refer to [DLK-143, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure"](#).

Does door lock /unlock with Intelligent Key button?

YES >> GO TO 3.

NO >> Refer to [DLK-146, "Diagnosis Procedure"](#).

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check the intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

MEMORY INDICATE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011284263

1.CHECK MEMORY INDICATOR

Check memory indicator.

Refer to [ADP-130, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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ADP

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000011284264

The following symptoms are normal operations, and they do not indicate a malfunction.

Symptom	Cause	Action to take	Reference page
Entry/exit assist function and seat synchronization do not operate.	No initialization has been performed.	Perform initialization.	ADP-61
	Entry/exit assist function is disabled. NOTE: The entry/exit assist function and seat synchronization function are disabled before delivery (initial setting).	Change the settings.	ADP-63
Telescopic does not operate by entry/exit assist function.	Telescopic is not interlocked with entry/exit assist function.	—	Exit assist function: ADP-22
			Entry assist function: ADP-24
Entry assist function does not operate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	ADP-20
Lumbar support and side support do not perform memory operation.	The lumbar support system and side support system are controlled independently with no link to the automatic drive positioner system.	—	Lumbar support system: SE-15 Side support system: SE-15
Memory function, log-in function, entry/exit assist function function, or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-20
			Log-in function: ADP-25
			Exit assist function: ADP-22
			Entry assist function: ADP-24
			Intelligent Key interlock function: ADP-27

DRIVER SEAT CONTROL UNIT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

Removal and Installation

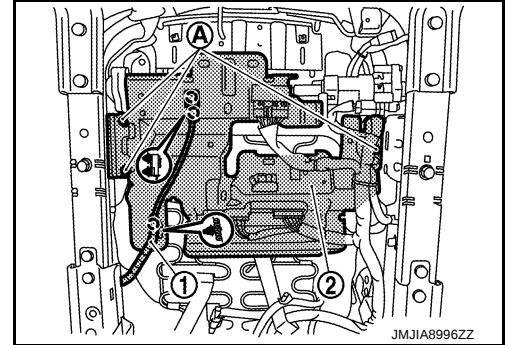
INFOID:000000011284265

REMOVAL

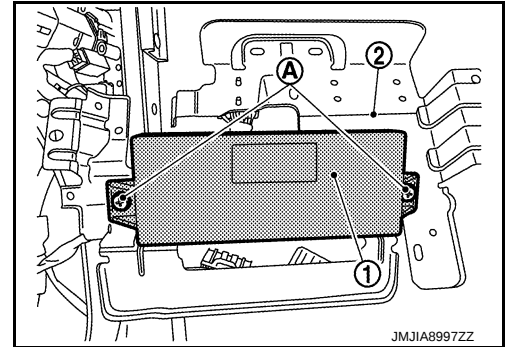
1. Remove driver seat. Refer to [SE-79, "Removal and Installation"](#).
2. Remove mounting bolts (A) and clip of the side air bag harness (1) from the harness mounting bracket (2).

 : Clip

3. Disconnect driver seat control unit connector.



4. Remove mounting bolt (A).
5. Remove driver seat control unit (1) from the harness mounting bracket (2).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to [ADP-60, "Description"](#).

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

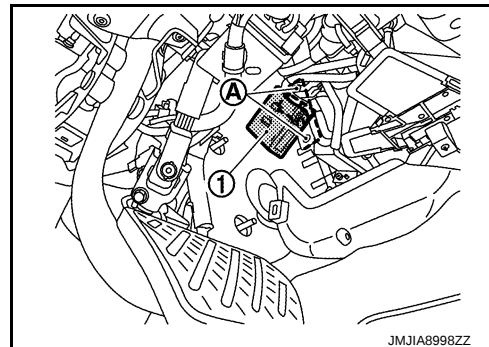
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

INFOID:000000011284266

REMOVAL

1. Remove instrument lower panel LH. Refer to [IP-13. "Removal and Installation"](#).
2. Remove mounting screws (A).
3. Disconnect automatic drive positioner control unit connector.
4. Remove automatic drive positioner control unit (1).



INSTALLATION

Install in the reverse order of removal.

SEAT MEMORY SWITCH

< REMOVAL AND INSTALLATION >

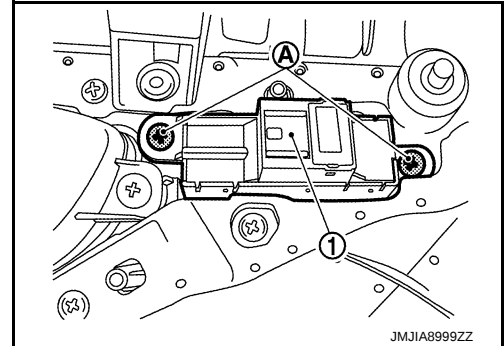
SEAT MEMORY SWITCH

Removal and Installation

INFOID:0000000011284267

REMOVAL

1. Remove front door finisher LH. Refer to [INT-13, "FRONT DOOR FINISHER : Removal and Installation"](#).
2. Remove mounting screws (A).
3. Remove seat memory switch (1).



INSTALLATION

Install in the reverse order of removal.

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B
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ADP

TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

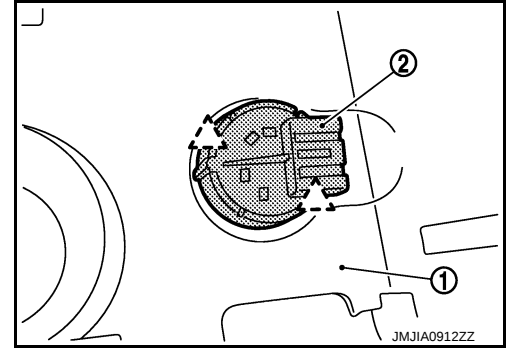
Removal and Installation

INFOID:000000011284268

REMOVAL

1. Remove steering column lower cover. Refer to [IP-13. "Removal and Installation"](#).
2. Press pawls and remove tilt & telescopic switch ② from the steering column lower cover ①.

 : Pawl



INSTALLATION

Install in the reverse order of removal.